Island Park Six-Lane

State Route 99 from south of the Grantland Undercrossing in Fresno County to north of the Avenue 7 Overcrossing in Madera County
06-FRE-99 PM 30.3/31.6
06-MAD-99 PM 0.0/1.6
EA 06-442620
SCH# 2009061047

Initial Study with Mitigated Negative Declaration/Environmental Assessment with Finding of No Significant Impact

Prepared by the
U.S. Department of Transportation
Federal Highway Administration
and the
State of California Department of Transportation

April 2010

General Information About This Document

What's in this document?

This document contains a Mitigated Negative Declaration and Finding of No Significant Impact, which examine the environmental effects of a proposed project on State Route 99 in Fresno and Madera County.

The Initial Study/Environmental Assessment and proposed Mitigated Negative Declaration were circulated to the public from June 10, 2009 to July 10, 2009. Comment letters were received on the draft document. Responses to the circulated document are shown in the Comments and Responses section of this document, which has been added since the draft. Elsewhere throughout this document, a line in the margin indicates a change made since the draft document circulation.

What happens after this?

The proposed project has completed environmental compliance after the circulation of this document. When funding is approved, the California Department of Transportation and the Federal Highway Administration can design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: G. William "Trais" Norris III, Sierra Pacific Environmental Analysis Branch, 2015 East Shields Avenue, Suite 100, Fresno, California 93726; (559) 243-8178 Voice, or use the California Relay Service TTY number, 1(800) 735-2929.

Widen State Route 99 from a four-lane freeway to a six-lane freeway and replace bridge from south of Grantland Undercrossing in Fresno County (PM 30.3/31.6) to north of Avenue 7 Overcrossing in Madera County (PM 0.0/1.6)

INITIAL STUDY
with Proposed Mitigated Negative Declaration/Environmental Assessment

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S. Code 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

THE STATE OF CALIFORNIA
Department of Transportation

5/4/09
Date of Approval

Jennifer H. Taylor
Office Chief, Central Region
Environmental South

6/10/09
Date of Approval

FOR: Walter C. Waidelich, Jr.
Division Administrator
Federal Highway Administration

FEDERAL HIGHWAY ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT

for

Island Park Six-Lane
State Route 99 from South of the Grantland Undercrossing in Fresno County to North of the Avenue 7 Overcrossing in Madera County, California

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the environmental assessment.

5/28/10
DATE

Frank T. Phan
For
Vincent Mammano
Acting Division Administrator
Federal Highway Administration

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to widen a 2.9-mile segment of the State Route 99 by constructing two additional lanes in the median to convert the existing four-lane freeway to a six-lane freeway from south of the Grantland Avenue undercrossing in Fresno County, to north of the Avenue 7 overcrossing in Madera County. The work also includes replacement and widening of one bridge within the project limits. New right-of-way is anticipated west of the existing highway between Grantland and Avenue 7. Two biofiltration swales for stormwater treatment would be constructed on the west side of the highway adjacent to the San Joaquin River and one infiltration basin would be constructed just north of the Avenue 7 overcrossing. One existing drainage basin located on the east side of the highway south of the Avenue 7 overcrossing would be deepened.

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 project would have no effect on: community character and cohesion, wild and scenic rivers, relocation of residences or businesses, pedestrian and bicycle facilities, geology and soils, plant species, and historical architectural resources.

In addition, the project would have no significant effect on air quality, noise, farmland, water quality, hydrology and floodplains, traffic and transportation, land use and planning, utility services and emergency services.

The project would have no significantly adverse effect on biological resources, paleontological resources, visual resources, hazards and hazardous materials, and archeological resources, because the following mitigation measures would reduce potential effects to insignificance:

- Biological impacts would be mitigated by compliance with all permit provisions.
- Visual impacts would be mitigated by providing funding for replacement planting, and compliance with the minimization measures outlined in this document.
- Paleontological impacts would be mitigated by monitoring during construction and adhering to the avoidance guidance presented in this document.
- Archaeological impacts would be mitigated by monitoring during construction and adhering to the avoidance guidance presented in this document.
- Hazardous waste impacts would be mitigated by compliance with all provisions set forth in this document.

Jennifer H. Taylor

Jennifer H. Taylor
Acting Division Chief
Central Region Environmental Division

04/27/10
Date

Summary

The California Department of Transportation (Caltrans), as CEQA lead agency, and the Federal Highway Administration (FHWA), as NEPA lead agency, propose to improve operations and reduce congestion on State Route 99 from south of the Grantland Avenue undercrossing (post mile 30.3) in Fresno County to north of the Avenue 7 overcrossing (post mile 1.6) in Madera County. The project would widen the existing four-lane State Route 99 freeway to a six-lane freeway by adding one lane in each direction in the median. The total length of the project is approximately 2.9 miles. Two alternatives are being considered: the Build Alternative and the No-Build Alternative.

The Build Alternative would consist of:

- Constructing two 12-foot lanes in the median, except for the San Joaquin River Bridge (Br No 42-131) where widening of the southbound side would be constructed to the west of the current alignment. The San Joaquin River Bridge will be replaced and widened enough to accommodate future transportation needs. However, this project will be striped to six lanes.
- Realigning a Madera County frontage road north of the San Joaquin River to provide adequate clearance between the frontage road and State Route 99.
- Widening the paved median shoulders to a standard width of 10 feet.
- Placing concrete median barriers on each side of the existing oleanders in the median south of the San Joaquin River Bridge, while on the north side of the bridge, oleanders would be removed and a single concrete barrier would be placed due to the narrow width of the median. The thrie beam barriers currently in the median would be removed.
- Overlaying 1.5 to 6 inches of hot mix asphalt on top of existing lanes to correct the sideways slope of the existing roadway throughout the project limits and to extend the life of the existing lane.
- Improving existing drainage ditches that are between the right-of-way and the outside shoulders for each direction to handle the additional stormwater runoff created by adding paved area.
- Constructing two biofiltration swales for stormwater treatment located west of the highway and one infiltration basin located north of the Avenue 7 overcrossing. One existing basin located on the east side of the highway south of the Avenue 7 overcrossing would be deepened. See Appendix F for the biolfiltration swale and infiltration basin location map.

The No-Build Alternative would keep this segment of State Route 99 in its present condition.

Summary of Potential Impacts from Alternatives

Potential Impact		Build Alternative	No-Build Alternative
Land Use	**Consistency with Fresno City General Plan**	Yes	No
	Consistency with General Plans of Fresno & Madera counties	Yes	No
Wild and Scenic River		The San Joaquin River is not considered a wild and scenic river. It is designated as a water of the United States.	N/A
Parks and Recreation		The San Joaquin River Parkway and Conservation Trust and the San Joaquin River Parkway Conservancy is within the project area and would not be affected by the construction of the proposed project.	N/A
Growth		Project is not anticipated to induce unplanned growth.	No impact
Farmlands		9.14 acres (reduced from 15 acres)	No impact
Community Character and Cohesion		No impact	No impact
Relocation/Real Property Acquistion		No residences or businesses would be relocated due to construction of the proposed project. Right of way would be acquired for construction of stormwater treatment measures.	N/A
Environmental Justice		No disproportionate impacts	N/A
Utilities/Emergency Services		Temporary interruption of services to utility customers during relocation of the power lines during construction may occur. No permanent interruption of utility services is anticipated. Utility relocation may be required. A Traffic Management Plan would be developed to minimize emergency service delays during the construction phase.	No impact
Traffic and Transportation/Pedestrian and Bicycle Facilities		Less congestion and improved safety for this segment of State	Congestion and traffic related accidents

Potential Impact	Build Alternative	No-Build Alternative
	Route 99. Non-motorized vehicles are not allowed on this segment of State Route 99.	would increase over time.
Visual/Aesthetics	Removal of oleander shrubs and eucalyptus trees.	No impact
Cultural Resources	Monitoring would be required during construction at specific stages determined by Caltrans.	No impact
Hydrology and Floodplain	The project is within the floodplain. Two biolfiltration swales and one infiltration basin would be built. One existing basin would be deepened.	No impact
Water Quality and Storm Water Runoff	Stormwater would no longer be discharged to the San Joaquin River directly from the San Joaquin River Bridge.	Water will continue to be discharged from the San Joaquin River Bridge to the San Joaquin River.
Geology/Soils/Seismic/Topography	No impact	N/A
Paleontology	Monitoring would be required during construction at specific stages determined by Caltrans.	No impact
Hazardous Waste/Materials	One biofiltration swale location is adjacent to a parcel that contains soils contaminated with petroleum hydrocarbons. No mitigation is anticipated at this time for removal of contaminated soils. Lead-based paint is present in the San Joaquin River Bridge, which will be replaced by a new bridge.	No impact
Air Quality	Minimize idling time for vehicles and diesel trucks due to decrease in congestion	Increased idling time due to continued increase in traffic congestion.
Noise and Vibration	There would be no substantial permanent noise impacts under NEPA or CEQA.	No impact
Natural Communities	Tree removal would be required within 30 feet on either side of the existing San Joaquin River Bridge potentially along the edge of the southernmost biofiltration swale. Native riparian trees that would be removed include cottonwood,	No impact

Potential Impact	Build Alternative	No-Build Alternative
	Gooding's black willow, box elder, Western sycamore, and Oregon ash.	
Wetlands and other Waters	Exact acreage of impacts is not known at this time in project design phase. Impacts estimated to be a maximum of 0.05 acres.	No impact
Plant Species	No special-status plant species were identified within the project area.	No impact
Animal Species	Mitigation measures would be implemented prior to construction of the proposed project to minimize affects to migratory birds and bat species.	No impact
Threatened and Endangered Species	No direct impacts to Swainson's hawk are anticipated to occur as a result of the proposed project. However, there is potential that a Swainson's hawk could build a nest adjacent to the project area before construction begins. Two Valley Elderberry Longhorn Beetle shrubs would be affected by the proposed project and would be removed as a result of construction.	No impact
Invasive Species	This project would not include transportation of invasive animals and would not change the surrounding habitat to encourage immigration of invasive animals to the site.	N/A
Construction	The proposed project would create temporary construction impacts to air quality and noise and vibration	N/A
Cumulative Impacts	This project would not cause a cumulatively considerable impact after project-level mitigation is in place.	N/A

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List of Abbreviated Terms

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
FHWA	Federal Highway Administration
NEPA	National Environmental Policy Act
PM	Post mile
USFWS	United States Fish and Wildlife Service

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) and the Federal Highway Administration propose to improve operations and reduce congestion on State Route 99 from south of the Grantland Avenue undercrossing (post mile 30.3) in Fresno County to north of the Avenue 7 overcrossing (post mile 1.6) in Madera County. The project would widen the existing four-lane State Route 99 freeway to a six-lane freeway by adding one lane in each direction in the median. The total length of the project is approximately 2.9 miles. See Figures 1-1 and 1-2 for the Project Vicinity Map and Project Location Map, respectively.

The Island Park Six-Lane project is included in the financially constrained 2008 State Transportation Improvement Program. The project is also included in the Council of Fresno County Government's 2007 Regional Transportation Plan and in its 2009 Draft Federal Transportation Improvement Program. The project meets the functional goals explained in the *Route 99 Corridor Business Plan* (2005) and the *Route 99 Corridor Enhancement Master Plan* (2005).

On November 7, 2006, voters approved the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B), which was programmed with funds on June 7, 2007. The act authorized $1 billion to be available to the Department of Transportation, upon appropriation in the annual budget act by the Legislature, for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the State Route 99 corridor in the San Joaquin and Sacramento Valleys. The project completes the widening of State Route 99 to six lanes within Fresno County. The project was funded in the State Transportation Improvement Program with Proposition 1B (Senate Bill 1266) funds on June 7, 2007. Inclusion in the Proposition 1B Bond program requires the preparation of a *Corridor System Management Plan (CSMP)*. The CSMP was approved by Caltrans, the Council of Fresno County Governments, and the Madera County Transportation Commission in May 2009.

This project would be programmed according to the same project components used for the State Transportation Improvement Program—(1) environmental and permits,

(2) plans, specifications, and estimates, (3) right-of-way, and (4) construction. Every component of this project is funded through the bond.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is:

- To alleviate traffic congestion, improving traffic flow on State Route 99
- Improve the safety of this section of State Route 99

1.2.2 Need

This project would match the existing facility south of the project to provide a continuous six-lane freeway through the city of Fresno into Madera County. The North Fresno Six-Lane Project, a project to widen the freeway to six lanes between Ashlan Avenue and Grantland Avenue, is expected to start construction by 2010.

State Route 99 is a designated freeway in the National Highway System and a national truck route under the Surface Transportation Assistance Acts of 1982. This segment of State Route 99 consists of a four-lane freeway connecting the city of Fresno to Madera County. Within the city limits of Fresno, existing State Route 99 is a six-lane urban freeway, which converts to a four-lane freeway north of the Ashlan Avenue interchange.

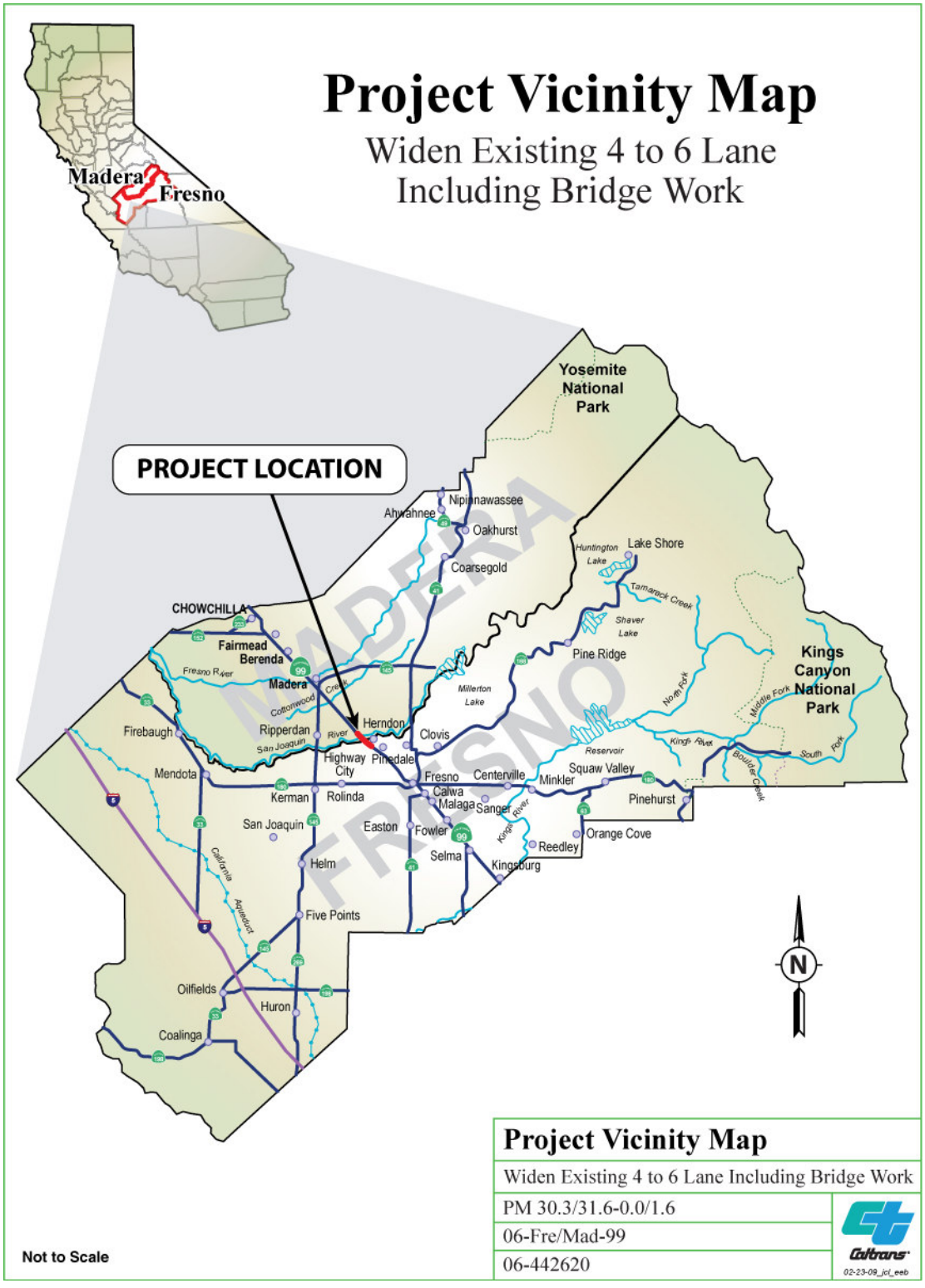


Figure 1-1 Project Vicinity Map

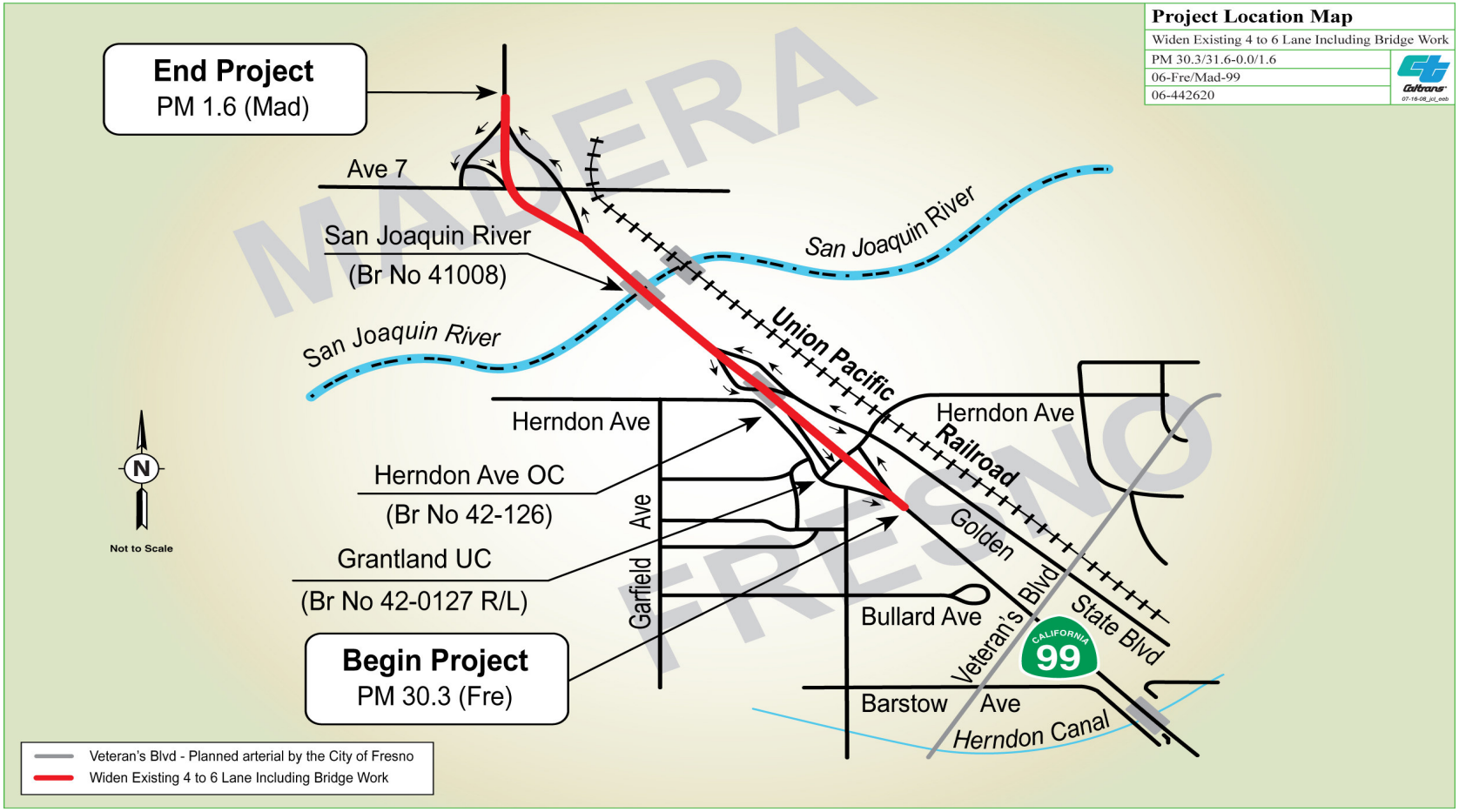


Figure 1-2 Project Location Map

Capacity

Commuter, commercial, recreational and agricultural use of State Route 99 continues to increase. State Route 99 is heavily used by interregional travelers, commuters, recreational travelers and freight transporters. Table 1.1 shows that the current average daily traffic count within the project limits is 67,000. By 2016, the average daily traffic count is predicted to be 84,500 vehicles. By 2026, the average daily traffic count will increase to 104,000 vehicles, and by 2036 the average daily traffic count will be 127,500 vehicles. Trucks make up 24 percent of this traffic.

Table 1.1 Proposed Traffic Volumes Average Daily Traffic and Level of Service

Year	2006	2016	2026	2036
Average Daily Traffic	67,000	84,500	104,000	127,500
Build Alternative Level of Service	---	C	D	D
No-Build Alternative Level of Service	C	E	F	F

Source: Department of Transportation Traffic Study, 2008

Level of Service is ranked “A” through “F,” with “A” indicating the free flow of traffic and “F” indicating the most congested conditions (see Figure 1-3). Important factors that determine level of service include travel speed, freedom to maneuver, and proximity to other vehicles. The 2025 Route Concept target level of service is “D” for this portion of the freeway. Traffic studies show this segment of State Route 99 is currently operating at a Level of Service “C” but predict it will decline to level of service “E” by the year 2016 and to “F” by the year 2026. Traffic is expected to continue at level of service F through to year 2036 without the proposed widening.

The 2025 Route Concept level of service that is acceptable is level “D”. The concept facility is a minimum six-lane freeway.

LEVELS OF SERVICE
for Freeways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. **No delays**
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. **No delays**
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. **Minimal delays**
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. **Minimal delays**
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. **Significant delays**
F		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. **Considerable delays**

Figure 1-3 Levels of Service

Safety

The accident history within the project limits for the most recent three-year study period, April 1, 2005 to March 31, 2008, reported a total of 133 accidents. Out of that total, 40 were injury accidents and 2 were fatal. Table 1.2 compares actual accident rates (accidents per million vehicle miles) within the project limits to the average accident rates on similar roadways throughout California. The northbound actual fatal accident rate is higher than the statewide average fatal accident rate, while the northbound actual fatal plus injury accident rate is slightly lower than the statewide average fatal and injury accident rate. The northbound actual total accident rate is lower than the statewide average total rate within the project limits is.

Table 1.2 State Route 99—Grantland to Avenue 7 Accident Data for Project September 1, 2004- August 31, 2007

	Actual			State Average		
Direction	**Fatal**	**Fatal & Injury**	**Total**	**Fatal**	**Fatal & Injury**	**Total**
North	0.019	0.25	0.65	0.015	0.27	0.68
South	0.000	0.15	0.64	0.015	0.27	0.68

Source: Department of Transportation Office of Traffic Engineering
** Accident Rate (per million vehicle miles)*

There were 67 accidents that occurred along this segment of northbound State Route 99 (2 fatal, 24 injury, 41 property damage only). There were 66 accidents that occurred along this segment of southbound State Route 99 (0 fatal, 16 injury, 50 property damage only).

The project would reduce accident rates, which currently exceed statewide average fatal accident rates for similar freeways. Majority of the accidents occurring within the project limits were traffic rear-end collisions and weaving-related collisions. Rear-end collisions occur when a fast-approaching vehicle comes upon a slower moving vehicle or a vehicle that has stopped ahead, and is unable to decelerate or stop in time to avoid a collision. By providing an additional lane, congestion is reduced and space is increased between vehicles, allowing more decision time and time to maneuver in case of traffic conflicts. Without highway improvements, increased congestion and the potential for accidents would increase.

1.3 Alternatives

The Island Park Six-Lane Project would convert 2.9 miles of the existing four-lane State Route 99 freeway to a six-lane freeway from south of the Grantland Avenue undercrossing in Fresno County to north of the Avenue 7 overcrossing in Madera County. The project would improve traffic operations by relieving congestion, reducing delays, and reducing the number of accidents within the project limits by adding one lane in each direction.

The following section describes the proposed action and the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. The alternatives are:

- Build Alternative
- No-Build Alternative

1.3.1 Build Alternative

The Build Alternative would widen State Route 99 from four lanes to six lanes throughout the project limits. Figure 1-4 is a typical cross section within two segments of the freeway where the proposed improvements would occur. The proposed work would include the following:

- Constructing two 12-foot lanes in the median, except for the San Joaquin River Bridge (Br No 42-131) where widening of the southbound side would be constructed to the west of the current alignment. The San Joaquin River Bridge will be replaced and widened enough to accommodate future transportation needs. However, it will be striped to six lanes for this project.
- Realigning a Madera County frontage road north of the San Joaquin River to provide adequate clearance between the frontage road and State Route 99.
- Widening the paved median shoulders to a standard width of 10 feet.
- Placing concrete median barriers on each side of the existing oleanders in the median south of the San Joaquin River Bridge, while on the north side of the bridge, oleanders would be removed and a single concrete barrier would be placed due to the median being too narrow. The thrie beam barriers currently in the median would be removed.
- Overlaying 1.5 to 6 inches of hot mix asphalt on top of existing lanes to correct the sideways slope of the existing roadway throughout the project limits and to extend the life of the existing lane.

- Improving existing drainage ditches that are between the right-of-way and the outside shoulders for each direction to handle the additional stormwater runoff created by adding paved area.
- New right-of-way would be acquired to construct two biofiltration swales and one infiltration basin. The two-biofiltration swales would be located west of the San Joaquin River Bridge, placed north and south of the river. The infiltration basin would be located just north of Avenue 7 to the west of State Route 99. An existing basin located south of Avenue 7 and east of State Route 99 would be deepened. See Appendix F for the biofiltration swale and infiltration basin location map

Trees within the clear recovery zone would be removed. Portions of the project limits do not meet the Highway Design Manual standard clear recovery zone of 30 feet from the existing travel way mainly due to the existing landscape. A clear recovery zone is an unobstructed, relatively flat or gently sloping area beyond the edge of the traffic lane, which gives drivers of errant vehicles an area in which to regain control. A number of eucalyptus trees and other landscaping shrubs next to the outside shoulders occurring at-grade to the roadway would have to be removed to achieve the standard clear recovery zone.

No local roads within the City of Fresno or Madera County would be affected, however a Madera County road north of the San Joaquin River would be realigned. No work would be done on the Grantland undercrossing, the Herndon overcrossing, or the Avenue 7 overcrossing. These structures are non-standard and have been addressed with a design exception. A design exception is requested when a design element is proposed which does not meet minimum mandatory or advisory design standards, and that may be neither warranted nor economically feasible. However, when warranted, upgrading of existing roadway features such as guardrail, lighting, superelevation, road width, etc., should be considered, either as independent projects or as part of larger projects.

Various utility facilities are located within the project limits such as aerial electric lines, aerial and buried telephone lines, gas and water lines, cable television, and sanitary sewer lines. Fiber optics would be installed for Traffic Management Center facilities. The only anticipated relocation is at the San Joaquin River Bridge; a telephone line and a gas line are currently attached to the bridge. Two options are being considered for the telephone and gas lines: relocation into the new bridge or

relocation outside of the right-of-way. A determination will be made in the final design stage of the project.

A temporary easement, not more than 25 feet wide, may be required from the adjacent Union Pacific Railroad for the construction of the San Joaquin River Bridge. The proposed easement would be decided on during the final design stages of the project. Caltrans does not anticipate acquisition of permanent right-of-way from the Union Pacific Railroad.

This alternative would cost an estimated $52.3 million ($48.71 for the current capital construction cost and $3.6 million for the current capital right-of-way cost). The project is expected to open to traffic in 2016.

Typical Cross Section
Island Park 6-Lane
Fresno and Madera County
PM 30.3/31.6-0.0/1.6
EA 06-442620

Caltrans 03-08-09_jcl_eeb

TYPICAL CROSS SECTION
STATE ROUTE 99

From 0.2 Miles South of Grantland Avenue Overcrossing
to 0.6 miles North of Avenue 7 Overcrossing

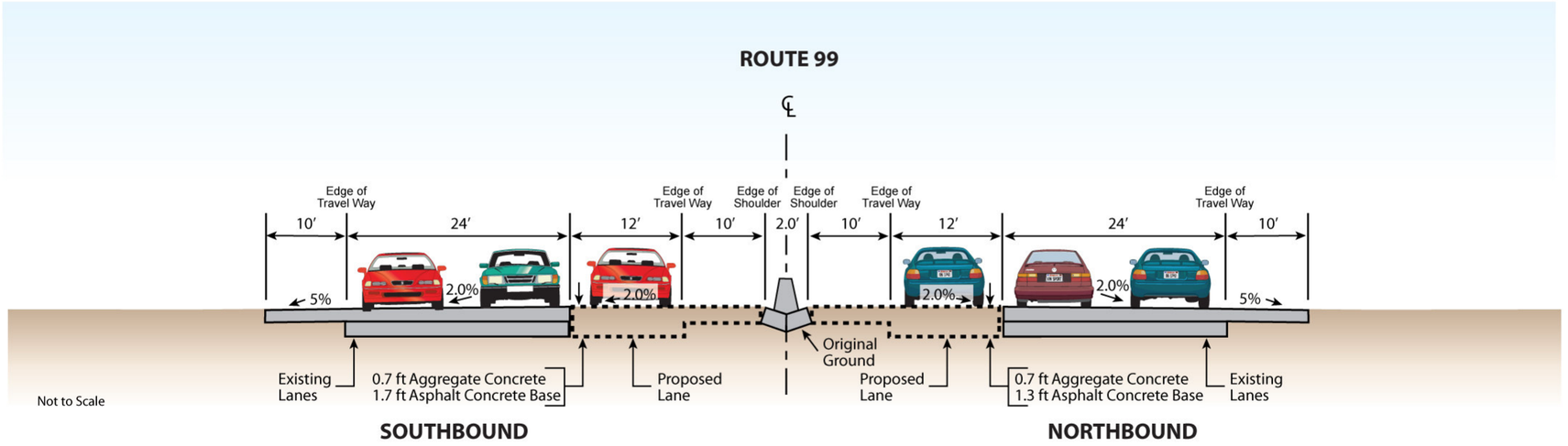


Figure 1-4 Cross Section

1.3.2 No-Build Alternative

The No-Build Alternative would keep this segment of State Route 99 in its present condition. Level of service would continue to decline to a level of failure. This alternative does not meet the Transportation Concept Report that states a level of service "D" is targeted by 2025. The No-Build Alternative would not meet the purpose and need for the proposed project.

1.3.3 Comparison of Alternatives

After the public circulation period, all comments will be considered, and Caltrans and the Federal Highway Administration will select a preferred alternative and make the final determination of the project's effect on the environment. In accordance with the California Environmental Quality Act, if no significant adverse impacts that cannot be satisfactorily mitigated were identified, Caltrans would prepare a Negative Declaration or Mitigated Negative Declaration. Similarly, if the Federal Highway Administration determines the action does not significantly impact the environment, the Federal Highway Administration would issue a Finding of No Significant Impact in accordance with the National Environmental Policy Act.

Criteria considered by the project development team to evaluate the project alternatives included the project purpose and need objectives, project costs, and potential environmental effects. Table 1.3 compares the alternatives. The Build Alternative would widen the existing State Route 99 freeway from four-lanes to six lanes by adding one lane in each direction in the median, replace one bridge structure, and would require up to 10.50 acres of right-of-way and/or easements at an estimated cost of $3.6 million.

The No-Build Alternative would not meet the project's purpose and need to reduce congestion and improve safety of this segment of State Route 99.

The Build Alternative was modified based on public and agency comments regarding the proposed basin design adjacent to the San Joaquin River, and a Value Analysis Study Report completed in February 2009. The recommendations in the Value Analysis Study Report included the elimination of two proposed infiltration basins adjacent to the San Joaquin River to be replaced with two biofiltration swales. With the No-Build Alternative, stormwater would continue to discharge directly from the bridge to the San Joaquin River.

Table 1.3 Comparison of Alternatives

Criteria	Build Alternative	No-Build Alternative
Reduce congestion	Level of service would range from "C" and "D" with the Build alternative for design years 2026 through 2036.	Level of service would deteriorate to "F" by the 2026 design year.
Improve safety	Increased capacity would reduce accident rates, which currently exceed statewide averages for similar freeways.	Without highway improvements, increased congestion and the potential for accidents would increase.
Estimated current total cost of the Build Alternative (includes roadway, structures, and right-of-way acquisition).	$52.3 million	No funding would be required for the No-Build Alternative.
Estimated acres needed for right of way acquisition or easements.	10.50 acres	No acreage would be disturbed by the No-Build Alternative
Possible environmental impacts that may result from the alternatives	Yes. See summary page.	Yes. Increased delays due to congestion may contribute to air quality impacts.
Conflict with Regional Transportation Plans or General Plans for Fresno and Madera counties.	No	Yes. The No-Build Alternative would not meet the transportation goals outlined in the Regional Transportation Plan or General Plans.

1.3.4 Identification of a Preferred Alternative

After circulation of the draft environmental document and review of the public and agency comments received during the circulation period, the Build Alternative was identified as the preferred alternative. The Build Alternative addresses the purpose and need of the project to improve traffic flow, alleviate traffic congestion, and improve safety of this section of State Route 99.

1.3.5 Alternatives Considered but Eliminated from Further Discussion

No other alternatives were proposed, considered, or eliminated. This project would widen in the median, with exception to the San Joaquin River Bridge, and would match the existing facility south of the project to provide a continuous six-lane freeway through the city of Fresno into Madera County. The North Fresno Six-Lane Project, is expected to start construction in 2010, and will widen the State Route 99 to six lanes between Ashlan Avenue and Grantland Avenue in the city of Fresno. No work would be done to interchanges or ramps within the scope of this project. No relocations of businesses or residences would occur as a result of this project, and right of way acquisition would be minimal.

1.4 Permits and Approvals Needed

Table 1.4 lists permits, reviews, and approvals that would be required for project construction.

Table 1.4 Permits and Approvals

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species Review and Comment on 404 Permit	Biological Opinion was received in February 2010.
U.S. Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the U.S. Nationwide Permit #14, 33	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.
California Department of Fish and Game	Section 1602 Agreement for Streambed Alteration	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.
Regional Water Quality Control Board	Section 402 Water Discharge Permit	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.
Regional Water Quality Control Board	401 Certification	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.
Central Valley Flood Control (formerly known as the Reclamation Board)	Encroachment Permit	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.
California State Lands Commission	CSLC Surface Leasing Permit	Pending completion in the Project Specifications and Estimate phase of the project. Anticipate completion in 2012.

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project, potential impacts from each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures. Any indirect impacts are included in the general impacts analysis and discussions that follow.

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

- Community Impacts—There are no impacts to community character and cohesion because the project would widen within the median on State Route 99, and no work would be done to interchanges or ramps within the project limits. Individuals own property within the project limits, however no residences or businesses would be relocated due to the construction of the project and right of way acquisition would be minimal. The build alternative would not cause disproportionately high and adverse effects on any minority or low-income populations as per Executive Order 12898 regarding environmental justice. No negative impacts to communities and neighborhoods adjacent to State Route 99 are anticipated. Impacts to schools, parks, and recreation facilities are not anticipated. (Initial Study Land Use Section)
- Pedestrian and Bicycle Facilities—Within the project limits, access to State Route 99 is not permissible for pedestrians and non-motorized vehicles. (Initial Study-Traffic and Transportation Section)
- Geology/Soils/Seismic/Topography—No known faults cross under or extend to any portion of the project site. The project would not result in substantial soil erosion or landslides. The project site is not located on a geologic unit or soil that is unstable, or which would become unstable as a result of the project, or

potentially result in lateral spreading, subsidence, settlement, liquefaction or collapse. (Geotechnical Study Memo, April 2008)

- Wild and Scenic Rivers— There are no water ways classified as wild and/or scenic rivers within the project limits. See the Wetlands and Other Waters section for discussion of the San Joaquin River (classified as a Jurisdictional Water of the U.S.), which is within the project limits. (Natural Environmental Study, March 2009)
- Plant Species—No special-status plant species were identified within the project area based on the special-status species requirements, project habitat evaluation, and plants observed on-site. (Natural Environmental Study, March 2009).

2.1 Human Environment

2.1.1 Land Use

Existing and Future Land Use

Affected Environment

The Island Park Six-Lane Project is a 2.9-mile segment of State Route 99 beginning just south of the Grantland undercrossing in Fresno County and ending north of Avenue 7 in Madera County. The project area is semi-rural in Fresno County, and land is primarily zoned for agriculture in Madera County, which dominates the area surrounding State Route 99 within the project limits. However there are a few residences, businesses, and recreational facilities within or immediately adjacent to the proposed project. Development near the Herndon northbound on-ramp in Fresno County continues to increase and includes hotels and restaurants.

The Aquarius Aquarium Institute is a nonprofit organization and is a proposed recreation/tourist facility within the project limits in Fresno County. The proposed aquarium would be located on a parcel donated by JFJ Farms to the west of State Route 99 and south of the San Joaquin River, while JFJ Farms retains ownership of the surrounding parcels. Caltrans has met with the Aquarius Aquarium Institute in efforts to coordinate with their plans. The Aquarius Aquarium project is still in the early stages of planning. Right-of-way or an easement may be needed from the proposed Aquarius Aquarium Institute parcel for maintenance access to the southern

biofiltration swale, a potential underground utility easement, and a widened embankment slope. Decisions pertaining to right of way acquisition will be made at the Plans, Specifications, and Estimates, or final design, phase of the project.

The San Joaquin River Parkway and Conservation Trust is outside of the project limits but is worth noting. The San Joaquin River Parkway and Conservation Trust jurisdiction is approximately 23 miles long and extends from the face of Friant Dam to the San Joaquin River Bridge on State Route 99. Camp Pashayan is a seasonal recreation site and is located east of the San Joaquin River Bridge on State Route 99 and to the east of the Southern Pacific Railroad. The San Joaquin River Parkway Conservation and Trust privately own 11 acres of Camp Pashayan while the California Department of Fish and Game publicly owns 20 acres of Camp Pashayan. The San Joaquin River Parkway Conservation and Trust and California Department of Fish and Game have dual jurisdiction over Camp Pashayan and jointly run the facility. The Fresno County Police Officers Association shooting range is adjacent to Camp Pashayan. These facilities are not within the project limits or Caltrans right-of-way. Access and/or use of Camp Pashayan and the Fresno County Police Officers Association shooting range would not be affected by the project. There are no anticipated impacts to planned or existing trails within the San Joaquin River Parkway Conservation and Trust or change in the use of the facility due to construction of the project.

Table 2.1 shows the proposed developments within a one-mile radius of the Island Park Six-Lane Project.

Table 2.1 Business/Residential Development Projects

Name/Location	Jurisdiction	Proposed Uses	Status
Proposed El Paseo Masterplan— west of State Route 99, bounded by Herndon Avenue, Bryan Avenue, Bullard Avenue, and Carnegie Avenue	City of Fresno	Development, in five phases, of approximately 238 acres with retail, office, hospitality, and entertainment uses. Phase I of the proposed project would be analyzed at a project level.	Currently in the review process by the City of Fresno.
Northeast corner of Hayes and West Herndon Avenues	City of Fresno	38 single-family residential units	Approved
East of State Route 99, just north of Herndon Avenue	City of Fresno	Development of three fast-food restaurants, a gas station and convenience mart, 94-room Hampton Inn hotel, a 88-room Holiday Inn Express hotel and 34,800 square feet of retail on nine acres.	Construction would be phased. The Hampton Inn and Holiday Inn Express hotels are currently under construction.

The Aquarius Aquarium Institute	Fresno County	Business/recreation and tourism uses.	City of Fresno Sphere of Influence revised on March 11, 2009 to include the aquarium in its affected territory. Subject to conditions, the aquarium received a conditional use permit from the Fresno County Public Works & Planning Dept. for construction.

Table 2.2 shows the proposed transportation projects within a 1-mile radius of the Island Park Six-Lane Project. Table 2.2 has been updated to reflect the current status of these proposed projects since the circulation of the Island Park Six Lane draft environmental document. It should be noted that the Island Park Six Lane Project is independent of the proposed transportation projects described below, and that changes to these proposed projects may continue to occur.

Table 2.2 Proposed Transportation Projects

Project	Description	Status
North Fresno Six-Lane Project	Caltrans would widen State Route 99 from 4 lanes to 6 lanes between Ashlan Avenue and Herndon Avenue in Fresno County.	The project is scheduled to begin construction in Summer 2010.
Shaw Avenue Interchange Improvement	Caltrans proposes to reconstruct the Shaw Avenue and State Route 99 interchange in the city of Fresno.	The project is on hold in the planning stage and would not be constructed during this project.
Veteran's Boulevard Interchange (formerly known as the Grantland Diagonal)	The City of Fresno in cooperation with Caltrans proposes to construct an interchange where the proposed Veteran's Boulevard alignment intersects at State Route 99.	This project is in the project approval/environmental document phase and is funded through design and right-of-way acquisition.
Park and Ride Facility	The City of Fresno proposes a park and ride facility in the vicinity of Herndon Avenue and State Route 99.	This project is on hold.
Herndon Avenue Ramp Improvements Project	The City of Fresno in cooperation with Caltrans proposes improvements to the Herndon/Grantland Avenue Interchange.	The project is in the initiation stage.
Herndon Avenue Reconstruction	The City of Fresno proposes to widen and reconstruct Herndon Avenue between State Route 99 and 600 feet east of Weber Avenue, and along Golden State Boulevard approximately 1400 feet north and 1000 feet south of Herndon Avenue.	Construction contract awarded by the City of Fresno on January 29, 2010.

In further discussion, the proposed Veterans Boulevard Interchange Project (formerly known as the Grantland Diagonal) proposes to construct a new local roadway (Veterans Boulevard) with new interchange connections and ramps onto State Route 99. The proposed Veterans Boulevard roadway would extend from West Shaw Avenue on the south to Herndon Avenue on the north. In addition to the new interchange and local roadway, a new grade separation crossing over the Union Pacific railroad and Golden State Boulevard is also proposed.

The proposed Herndon Avenue Ramp Improvement Project was initiated to analyze the traffic impacts of proposed development in the vicinity of the interchange. The proposed El Paseo Project would participate in this project. This proposed project is in the initiation stages and may include some or all of these design features:

- Removal of the Grantland southbound off-ramp at State Route 99
- Widen the northbound off ramp at State Route 99/Herndon Ave. and install a traffic signal
- Add an additional westbound lane on Herndon Avenue from State Route 99 northbound off-ramp intersection under State Route 99 to Parkway Drive
- Install traffic signals at Herndon Avenue/Parkway Drive and Grantland Avenue/Parkway Drive intersections
- Widen the southbound onramp from Parkway Drive onto State Route 99 to two lanes, in addition to a metering light

According to the 2025 City of Fresno General Plan, the present sphere of influence covers 90,000 acres (141 square mile of which about 54,000 acres [60 percent] are occupied by the current city limits).

Madera County is primarily zoned for agriculture within the project limits. Caltrans met with the Madera County Planning office in March 2009 regarding future planned developments. It was discussed that no developments were planned within the project limits and no changes to the current zoning were planned.

Current land use was identified using zoning maps for Fresno County, City of Fresno, and the 2025 Fresno County General Plan and the 1995 Madera County General Plan. The project area is zoned for various designations including commercial, residential, light industrial and agriculture. The project area is parallel to and near the easternmost boundary of the West Area Community Plan and within the City of Fresno's sphere of influence. State Route 99 within the project limits is a major junction for

interregional travel and transport of goods, and the continued development near Grantland Avenue caters to these commuters.

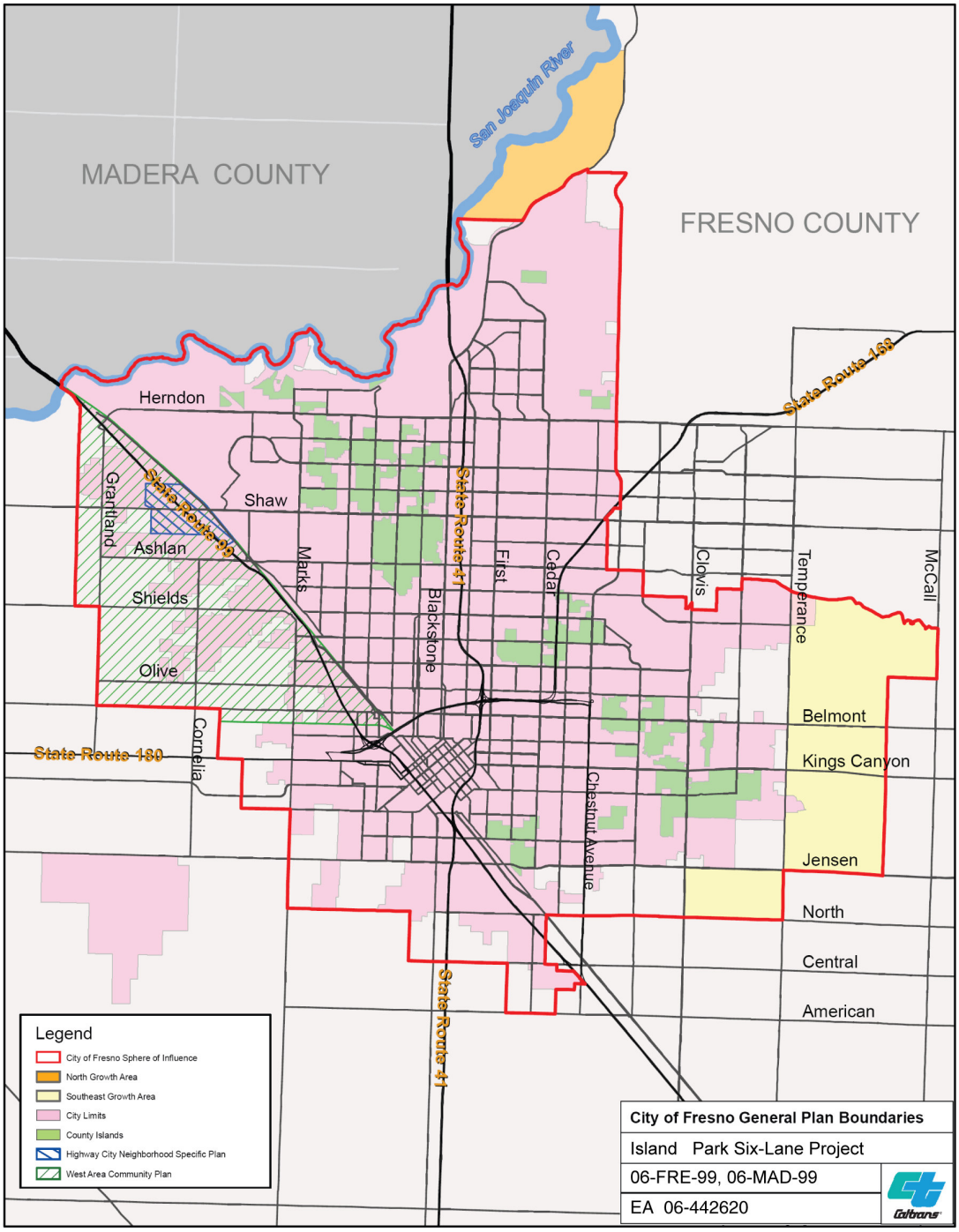


Figure 2-1 City of Fresno Community Plan Boundaries

Environmental Consequences

The project would neither require nor encourage a change in the land use. The Fresno County General Plan designated the area surrounding the project in Fresno County as commercial, residential, light industrial and agriculture. The project area in Madera County is mostly zoned for agriculture. The project would not conflict with the current land use designations.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

Cumulative Impacts

Potential land use cumulative impacts were analyzed, and other than minor acquisition of farmland, land use would not be substantially altered. A detailed discussion of farmland impacts can be found in Section 2.1.3. Due to comments received during the review period for the draft environmental document, the following addresses other proposed projects in the area although no cumulative impacts are anticipated as a result of this project.

This project would not divide an established community or 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 or specific plans). Proposed and recent developments, including residential, commercial, and transportation facilities are planned within a 1-mile radius of the Island Park Six Lane Project (see Table 2.1 and Table 2.2).

This project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Consistency with State, Regional, and Local Plans

Affected Environment

The following information from these documents was considered supportive in determining consistency with regional and local plans as well as the project's purpose and need:

2007 Fresno County Regional Transportation Plan

The project is included in the Fresno County 2007 Regional Transportation Plan (Amendment #2). The project is financially constrained and is programmed with Proposition 1B funding between 2008 and 2012, as part of its financially constrained project list. The 2007 Regional Transportation Plan was adopted May 31, 2007.

Fresno County General Plan

The Fresno County General Plan policy document states that the County shall ensure that capacity-increasing projects on the Inter-regional Highway System (Interstate 5, and rural portions of State Route 99 and State Route 41) use funding from state and federal sources intended for improvements to that system.

City of Fresno 2025 Fresno General Plan

The City of Fresno General Plan identifies the segment of State Route 99 from Ashlan Avenue to the San Joaquin River as deficient and concludes that it ultimately needs to be widened to eight lanes. The transportation objective in the Fresno General Plan sets a policy for the city to support the construction of planned freeways.

2009 Fresno County Federal Transportation Improvement Program

All federally funded and regionally significant projects must be listed in a Federal Transportation Improvement Plan. Although the Island Park Six-Lane Project is funded by a state bond, it is also regionally significant. Therefore it is listed in the 2009 Federal Transportation Improvement Program.

West Area Community Plan

The city's West Area Community Plan promotes compatibility between areas planned for, or committed to, active farming operations and areas planned for urban development. This plan supports, through policy, the establishment of a service area and urban growth management fee for design and construction of planned overcrossings of State Route 99 and for north-south traffic flow improvements within the West Area, including the Grantland Diagonal.

1995 Madera County General Plan

The Madera County portion of the project is consistent with: the Madera County Transportation Commission (the Regional Transportation Planning Agency) and the designated Metropolitan Planning Organization for Madera County. The Commission

is responsible for the development and adoption of the Regional Transportation Plan and Transportation Improvement Program as required by state law.

2009 Interim Federal Transportation Improvement Program for Madera County

The project's open year is consistent with the construction completion date identified in the Federal Transportation Improvement Program and the Regional Transportation Program.

Environmental Consequences

The project is consistent with the 2025 City of Fresno General Plan, County of Fresno General Plan, 2007 Regional Transportation Plan, 2009 Federal Transportation Improvement Program, and the Madera County Regional Transportation Program. The project is consistent with state, regional and local plans. The increase in capacity would help accommodate existing traffic and alleviate projected traffic resulting from planned development.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required.

2.1.2 Growth

Regulatory Setting

The Council on Environmental Quality regulations, which implement the National Environmental Policy Act of 1969, requires evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The Council on Environmental Quality regulations, 40 Code of Federal Regulations 1508.8, refers to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act also requires the analysis of a project's potential to induce growth. California Environmental Quality Act guidelines, Section 15126.2(d), require that environmental documents "…discuss the ways in which the

proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

Affected Environment

The growth study completed for the project focuses on the relationship of the project to economic and population growth or to the construction of additional housing in the project area. It focuses on the potential for a project to facilitate or accelerate growth beyond planned developments, or induces growth to shift from elsewhere in the region.

The population of Fresno County is expected to grow from 804,508 in 2000 to 1,201,792 in 2020, according to the July 2007 Department of Finance projections. Key employment growth sectors would be agricultural manufacturing, non-agricultural manufacturing, and commercial office development.

The population of Madera County experienced an increase from 123,109 in 2000 to 146,513 in 2007, according to the 2000 US Census Bureau. Madera County's population increase resulted from the combination of births and migrations.

Factors affecting growth patterns depend on a range of forces that can be local, statewide, or even national in scope and may include the relative cost and availability of housing, commutes to higher-wage jobs, availability of amenities, local and regional growth policies and development constraints, as well as travel-time savings.

During the project scoping and environmental clearance phase of the project, Caltrans conducted a preliminary analysis or first-cut screening to determine whether there would be a potential for project-related growth. Caltrans considered the interrelated factors of accessibility, project type, project location, and growth pressure. The screening project also took into consideration:

- City of Fresno General Plan
- County of Fresno General Plan
- County of Madera General Plan
- Draft Project Study Report, which included traffic count data, accident data, and traffic forecasts
- Project development team meetings with the local governments

According to the City of Fresno's 2025 General Plan, Fresno is the only city out of the 15 incorporated cities in the county that has projected land demand in 2020 that

cannot be accommodated within the sphere of influence identified by the 1983 Joint Resolution on Metropolitan Planning and 1984 Fresno General Plan (as amended).

Under the general plan, development in the rural areas (outside the spheres of influence of the cities) of Fresno County would contribute a very small portion of the growth in traffic volumes on the Inter-regional Highway System (2000 Fresno County General Plan Updated Environmental Impact Report).

Growth is expected to occur in Fresno County, with an estimated population of 1,201,792 by 2020, according to the July 2007 Department of Finance projections.

Growth in the 2007 to 2011 period would average 2.0 percent per year compared to an overall rate in the state of 1.1 percent. The additional traffic is expected to increase demand on facilities like State Route 99 that are at or near capacity.

Most of the land west of State Route 99 in the project area is designated for residential development in the West Area Community Plan. To the south of the project limits, new residential development is proposed to provide housing for the projected near-doubling in population for the West Area Community Plan between 2000 and 2025: from 37,134 in 2000 to 73,913 in 2025. This amount makes up 24 percent of the total projected increases in population (308,460) within City of Fresno's urban boundary by 2025.

Environmental Consequences

Based on the first-cut screening, Caltrans concluded that no further analysis is required with respect to growth based on the following questions and discussions:

a) *How, if at all, the project potentially changes accessibility?*

The project would not provide additional access points, change existing accessibility (driveways or easements), or result in zoning changes. This segment of State Route 99 would be widened in the median.

b) *How, if at all, the project type, project location, and growth pressure potentially influence growth?*

The project would widen in the median. The project would not induce more growth than is planned in Fresno's general plan. The project is in response to traffic conditions and traffic forecasts based on local plans and growth projections. It is not

anticipated to encourage unplanned growth from unplanned development, but to accommodate current planned land use in the City of Fresno and County of Fresno.

c) *Whether or not project-related growth is "reasonably foreseeable."*

The planned developments shown in Table 2.1 in the Land Use section would not have any effect on project-related growth. The Island Park Six-Lane Project is not being proposed to support major new or unplanned development. The project was initiated as a response to current traffic conditions and traffic forecasts based on local plans and growth projections. It would instead support current planned land use within the counties of Fresno and Madera.

Since Caltrans projects must be cost effective, they are not designed with excess capacity that could induce unplanned growth during the 20-year period following completion. The future project capacity would not exceed the predicted traffic capacity necessary to serve the planned population of the area, and thus would not induce growth.

d) *If there is project-related growth, how, if at all, will that impact resources of concern?*

The project would not increase growth in population, transportation capacity or change accessibility in excess of what is projected in the City of Fresno, and Fresno and Madera counties' general plans or in forecasts made by regional planning agencies. The project would widen in the median and span the San Joaquin River. The project would have a potential to impact farmland, cultural resources, and biological resources in this segment of State Route 99. However, any new development would require a change from the jurisdictional counties and would have to be compatible with the general plans. Therefore, any project-related growth could be avoided or minimized in the future.

Avoidance, Minimization, and/or Mitigation Measures

The Island Park Six-Lane Project would widen in the median, and is not being proposed to support major new, unplanned development. The project was initiated as a response to current traffic conditions and traffic forecasts based on local plans and growth projections. The project meets the functional goals explained in the *Route 99 Corridor Business Plan* (2005) and the *Route 99 Corridor Enhancement Master Plan*

(2005). It would support current planned used within Fresno and Madera counties. Thus, no mitigation measures are required.

2.1.3 Farmlands/Timberlands

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Policy Act (United States Code0 4201-4209; and its regulations, 7 Code of Federal Regulations Ch. VI Part 658) require federal agencies, such as the Federal Highway Administration, to coordinate with the Natural Resources Conservation Service if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the Farmland Protection Policy Act, 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

A windshield survey was completed in November 2008 and February 2009, and a record search was completed on January 13, 2009.

The Fresno County Agriculture Commissioner reported a total agricultural production value of $5,347,398 in 2007, an increase of more than 10 percent from the 2006 production value. Grapes, almonds, and milk were the top three commodities in dollar value. In Fresno County, uncertainty of federal water project delivery has reduced the acreage of some crops, and labor shortages continue to occur. The 2007 Fresno *Agriculture Crop Report* assumes that a portion of the increased revenue from agriculture production is due to rising costs, which in turn result in the pressure to ensure profitability.

The Madera County Agriculture Commissioner reported a total agriculture production value of $1,220,230 in 2007, an increase of 18 percent over the total reported in 2006. Milk, nuts and grapes were the top three commodities in dollar value. Milk was Madera's leading commodity reported for 2007 (previously reported number one in

1940), which represents a 78 percent growth in its value over 2006. It was reported in the 2007 Madera *Agriculture Crop Report* that overall, field crop values saw a gain of almost 10 percent over 2006, mainly due to increased alfalfa and corn values.

Soils within the project area are primarily limited to Hanford fine sandy loam, which is suitable for local agriculture. A vineyard is located north of Avenue 7 west of State Route 99. There are no Williamson Act land parcels within the project limits. There is also land zoned as agriculture within the project limits that is currently not in production.

Environmental Consequences

The Natural Resources Conservation Service Farmland Conversion Impact Rating was completed for the project in 2009 (see Appendix D). The Farmland Conversion Impact Rating determines the relative value of farmland to be converted by using a formula that weighs farmland classification, soil characteristics, irrigation, acreage, creation of non-farmable land, availability of farm services and other factors. The Natural Resources Conservation Service only uses Prime/Unique and Statewide/Local Importance classified land on the Farmland Conversion Impact Rating form. If the Farmland Conversion Impact Rating exceeds 160 points Caltrans considers measures that would minimize or mitigate farmland impacts. The project spans Fresno and Madera County, therefore Caltrans requested that both Fresno County and Madera County Natural Resources Conservation Service Centers rate their county respectively. Two biofiltration swales would be located on parcels adjacent to the San Joaquin River designated as farmland. The vineyard located north of Avenue 7 is the site for the new infiltration basin (See Appendix F).

The Fresno Natural Resources Conservation Service determined that the project would convert prime and unique farmland having a relative value of 24 out of 100 possible points under these criteria. No statewide and locally important farmland is being converted within Fresno County. Additional points were factored in on the Natural Resources Conservation Service form for a total impact rating of 58 points for the Build Alternative.

The Madera Natural Resources Conservation Service determined that the project would convert prime and unique farmland as well as statewide and locally important farmland, resulting in a relative value of 67 out of 100 possible points under these criteria. Additional points were factored in on the Natural Resources Conservation Service form for a total impact rating of 127 points for the Build Alternative.

Table 2.3 shows the conversion rating used to determine the Farmland Impact Rating for Fresno and Madera County.

Table 2.3 Farmland Conversion for the Build Alternative

Alternatives	Land Converted (acres)	Prime & Unique Farmland (acres)	Statewide/ Local Importance (acres)	Percent of Farmland in County	Percent of Farmland in State	Farmland Conversion Impact Rating
Fresno County						
Build	8.6	8.6	0.0	0.00066	0.0000009	58
Madera County						
Build	6.4	3.2	3.0	0.00090	0.0000006	127

Source: Form NRCS-CPA-106 (Farmland Conversion Impact Rating for Corridor-Type Projects)

The impact rating for both Fresno and Madera County is less than 160 points, which is the level that would trigger consideration of greater protection under the Farmland Protection Policy Act. There are no Williamson Act Land contracts affected within the proposed project.

Between the draft environmental document circulation period and final environmental document, a decision was made by the Project Development Team to replace the proposed basins adjacent to the San Joaquin River with biofiltration swales, resulting in fewer acres of farmland acquisition. The current design would acquire 9.14 acres of farmland, while the original design proposed to acquire 15 acres of farmland (see Appendix F).

Avoidance, Minimization, and/or Mitigation Measures

No mitigation for farmland is required.

2.1.4 Relocation and Real Property Acquistion

Regulatory Setting

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix D for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Please see Appendix C for a copy of the Department's Title VI Policy Statement.

Affected Environment

Few residences, businesses, and recreational facilities are within the project area. The project area is semi-rural and zoned primarily for agriculture. Development near the Herndon northbound on-ramp in Fresno County continues to increase. A detailed discussion of these features can be found in Section 2.1.1 Land Use.

Environmental Consequences

No businesses or residences would be relocated as a result of the construction of this project, however right of way acquisition and easements would be required. A majority of the right of way acquisition would be farmland. A detailed discussion of these impacts can be found in Section 2.1.3 Farmland.

The following right of way acquisitions/easements would occur:

- Right of way would be needed for construction of the southern and northern biofiltration swales adjacent to the San Joaquin River.
- Right of way would be needed for construction of the infiltration basin north of the Avenue 7 overcrossing.
- Utility easements would be needed for project.
- A temporary construction easement would be needed from the Union Pacific Railroad for the construction of the new bridge.

The following right of way acquisitions/easements under consideration:

- Right of way acquisition or an easement may be needed for maintenance access to the southern biofiltration swale, a potential underground utility easement, and a widened embankment slope south of the San Joaquin River.

Avoidance, Minimization, and/or Mitigation Measures

The draft environmental document proposed two infiltration basins adjacent to the San Joaquin River as stormwater treatment measures. These proposed basins adjacent to the river have been replaced with biofiltration swales, which will require less right

of way acquisition. Final decisions for right of way acquisition and easements will be made during the final design stage of the project.

2.1.5 Utilities/Emergency Services

Affected Environment

This section discusses information obtained from the Right-of-Way Data Utility Sheet Memo (June 2008) that was completed for the proposed project. Utilities located within the project include aerial electric lines, aerial and buried telephone lines, gas lines, water lines, cable television, and sanitary sewer lines.

The San Joaquin River Bridge would be rebuilt inside of Caltrans right-of-way along the current alignment. This may require a construction and maintenance agreement between Caltrans and the railroad. It is anticipated that a 25-foot construction easement would be required from the railroad that runs adjacent to the San Joaquin River Bridge.

Table 2.4 lists utilities within the project area that may be impacted. Caltrans does not anticipate impacts to City of Fresno water main and sewer lines, Madera Irrigation District lines, or Qwest Cable television lines.

Table 2.4 Utilities within the Project Area

Utility Ownership	Facilities
American Telephone and Telegraph Company (AT&T)	Overhead and underground telephone cable and fiber optic lines
Pacific Gas and Electric (PG&E)	Overhead electric line, gas line, gas main, transmission tower line

Caltrans is still verifying ownership of a private agricultural irrigation line found within the right-of-way.

First responders to emergency incidents within the project area may include California Highway Patrol, Cal Fire, the Madera County Sheriff's Department, Fresno County Sheriff's Department, and private emergency medical transportation.

Environmental Consequences

The utilities currently located under the San Joaquin River Bridge include AT&T and PG&E. A few options are being considered for the AT&T line ranging from

relocating a portion of the telephone line onto the new bridge to relocating the entire telephone line outside of the right-of-way. Two options are being considered for the gas line: relocation into the new bridge or relocation outside of the right-of-way to the east of the Union Pacific Railroad. If utilities will be relocated outside of the right-of-way and environmental study area, additional environmental studies would be required. The responsibility for conducting these studies would be decided by Caltrans and the corresponding utility company.

A temporary easement will be required of the Union Pacific Railroad during the construction phase of the San Joaquin River Bridge. The bridge would be widened to the west of the current State Route 99 alignment to accommodate the addition of two lanes in the northbound and southbound direction. Construction would occur in phases. This temporary easement would be used during construction work on the San Joaquin River Bridge, and thus would not cause any substantial impact.

Ramps and local roads within the project limits may be closed during nighttime hours. Response times for emergencies could be lengthened temporarily during construction.

Emergency services would not be affected by the construction, but response times for emergency medical and fire services could be extended. Detours may be constructed should ramps and local roads need to be closed temporarily for construction. Emergency vehicles would receive preference through any detours and lanes closures.

Avoidance, Minimization, and/or Mitigation Measures

Any utility relocation outside of the boundaries of the environmental studies completed for the project would require separate environmental studies. If relocation of utilities are required, the impacts to services would be temporary. A detailed study would be conducted during the final design phase of this project and utility conflict mapping would be prepared.

A transportation management plan would be implemented to ensure timely access for first responders. The added capacity would improve response time once the project is complete. A preliminary transportation management plan has been developed for this project and would be updated in the final design phase. The majority of the construction of the project is located within the median and would require a reduction of existing lane widths during construction. Traffic control would be necessary during the construction of all shoulders, lanes and the San Joaquin River Bridge.

2.1.6 Traffic and Transportation/ Pedestrian and Bicycle Facilities

Affected Environment

A Traffic Operation Analysis was prepared in October 2007. A Safety Analysis was completed in May 2008, and additional traffic data was provided in March 2009.

This section of State Route 99 is a divided four-lane freeway between the Grantland Avenue undercrossing in Fresno County and the Avenue 7 overcrossing in Madera County. Within the project limits, access to State Route 99 is limited to freeway-legal motor vehicles, as access to non-motorized vehicles is prohibited. There are no existing bicycle/pedestrian lanes along this portion of State Route 99.

The current average daily traffic count within the project limits is 67,000 vehicles. By year 2016, the average daily traffic count is estimated to be 84,500 vehicles. Trucks make up 24 percent of this traffic. This section of State Route 99 is currently operating at a Level of Service "B" to "D". Refer to Figure 1-3 for a Level of Service for Freeways diagram. Caltrans has established Level of Service "D" as the acceptable Level of Service for State Route 99 for the 20-year planning horizon. The Route Concept Level of Service also considers a Level of Service "D" to be acceptable.

Environmental Consequences

The project would convert a four-lane freeway to a six-lane freeway, adding capacity to the alignment. One existing bridge would be replaced and widened to the west to accommodate the new lanes in the median. Inside and outside shoulders would be widened to standard widths, and trees would be removed to achieve the standard clear recovery zone. Caltrans received comments at the Public Hearing in June 2009 and written comments submitted during the circulation period of the draft environmental document regarding bicycle/pedestrian access within the project limits, specifically on the San Joaquin River bridge. Caltrans project development team reviewed and discussed these comments and the actions needed for a bicycle/pedestrian facility within the scope of this project.

The proposed improvements in the Island Park Six Lane Project are constrained by The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. These funds may be used for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the State Route 99 corridor.

Deputy Directive DD-64-R1 was signed in October 2008, and directs the Department (Caltrans) to integrate multimodal projects in balance with community goals, plans, and values. Developing a network of "complete streets" requires the collaboration among all Department functional units and stakeholders to establish effective partnerships. The intent of the directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of "complete streets".

A "complete street" provides safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorist appropriate to the function and context of the facility, unless prohibited. This Directive does not supercede exiting laws. The purpose of the project is to increase capacity to the State Route 99 facility. The project facility is classified as a freeway with 24 percent truck traffic. The Ultimate Transportation Concept for State Route 99 is eight lanes.

The City of Fresno currently proposes a Class I Bikeway across the San Joaquin River for both recreational and commuter purposes in order to complement the City's draft vision plan for Bicycle Master Plan, and enhance mobility for all modes of transportation in the Central Valley and be a leader for bicycle mobility. A Class I Bikeway, or bike lanes, is a separate facility from roadways with motorized traffic. Caltrans has discussed with both the County of Madera and the City of Fresno proposed bicycle/pedestrian facilities in the vicinity of State Route 99 or on State Route 99 within the project limits. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a San Joaquin River bridge to accommodate future transportation needs and would provide an opportunity for consideration of a future Class II Bikeway. Class II Bikeways are striped lanes for one-way travel on a roadway. This project would not include a Class 1 Bikeway, and does not support linking freeway shoulders to recreational Class 1 facilities because this could entice novice riders into traffic situations that they may not be experienced and/or prepared to handle.

Caltrans has discussed the proposed City of Fresno Bicycle Master Plan with both the City and the consultant preparing the Bicycle Master Plan. The City of Fresno consultants identified the west side of State Route 99 to be the most viable location as there is a Madera County frontage road that could possibly provide a connection to a trail and/or the bridge. The Fresno Bicycle Master Plan has not been approved and coordination efforts have not begun with the County of Madera to study the connectivity options and/or continuity possibilities for the proposed Bicycle Master

Plan. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans.

Within the scope of this project, construction staging requires additional width on the proposed southbound San Joaquin River bridge to accommodate 4-lanes during construction on the northbound bridge. This resulting additional width would be used for future transportation needs. Therefore, the construction of this project will allow the opportunity for a bicycle/pedestrian facility on the San Joaquin River bridge. Future local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Caltrans commits to participation in an ongoing dialogue with our partners to explore the opportunities associated with the new bridge shoulders. Because the Island Park bridge will have 10' shoulders, there are opportunities to consider bicycle traffic that do not exist on the current bridge, which prohibits bike traffic. We look forward to an ongoing dialogue with our partners on this issue as their plans are completed and approved, as our own bicycle planning process continues. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highway systems.

By year 2026, the average daily traffic count would increase to 104,000 vehicles and, by year 2036, the average daily traffic count would be 127,500. The project would maintain concept Level of Service D or better through year 2026. By the year 2036, various Intelligent Transportation System (ITS) elements are proposed for use along the Fresno-Madera State Route 99 Corridor. These elements include Traffic Monitoring Stations, Closed Circuit Television Cameras, Ramp Metering, and Changeable Message Signs. The ITS elements will be used during periods of peak traffic to help maintain the corridors concept Level of Service D. Refer to Table 2.5 for Level of Service with and without the project.

Table 2.5 Level of Service with and without the Project

Alternative	Existing	2016	2026	2036
Build	---	C	D	D
No Build	C	E	F	F

Source: Department of Transportation Office of Traffic Engineering

Construction of the project would temporarily affect travel along State Route 99. Construction would mostly occur in the median and would require shifting the

existing traffic lanes onto the outside shoulder. Two lanes in each direction would remain open to traffic at all times during construction. Delay in traffic would be expected but this impact would not be substantial. The project does not propose changes to the interchanges.

Avoidance, Minimization, and/or Mitigation Measures

A traffic management plan would be developed to minimize delays and maximize safety for the motorist during construction. The traffic management plan would include, but is not limited to:

- Use of portable changeable message signs.
- Off-peak and night work and project phasing.
- Incident management through a Construction Zone Enhancement. Enforcement Program and traffic surveillance stations.
- Release of information through brochures, mailers and media releases managed by the Caltrans Public Information Office.

2.1.7 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969 as amended 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 U.S.C. 4331[b][2]). To further emphasize this point, the Federal Highway administration in its implementation of National Environmental Policy Act of 1969 (23 U.S.C. 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 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

A visual impact assessment was prepared in March 2009. The focus of this analysis was to determine the proposed project's impacts on views from and adjacent to State Route 99, as well as other potentially critical locations. The process used in this

assessment followed the guidelines outlined in the publication "*Visual Impact Assessment for Highway Projects,"* Federal Highway Administration.

The project lies in California's Central Valley within Fresno and Madera counties. The regional landscape is known for its abundant agricultural production, specifically of field crops and orchards typical of the San Joaquin Valley. The landform of the project area is typical of the landform of the San Joaquin Valley; the land is generally flat with distant views of the Sierra Nevada range to the east and the coastal range to the west.

Located below grade of the San Joaquin River Bridge, at the Fresno/Madera County Line, are the San Joaquin River and its bluffs, and the San Joaquin River Parkway/Camp Pashayan recreation area. Mature oaks, cottonwoods, sycamore trees, and native grasses characterize this recreation area. The California Department of Fish and Game and the San Joaquin River Parkway & Conservation Trust jointly run the 31-acre natural area. The parkway has a nature trail, fishing, boating access for non-motorized craft, and numerous picnic sites.

The project limits are in a rural and agricultural setting characterized by open fields and croplands. The highway creates a strong line in the landscape. This line is accentuated in its continuity and dominance by the presence of median oleander that reinforces this line. The oleander also serves to visually soften the highway by blending it with its environment, and is a visual screen for headlight glare from opposing traffic.

Visual Assessment Methodology

The existing landscape of the project is viewed from each viewpoint and an inventory of on-site visual resources is developed. These visual resources are evaluated and rated for their aesthetic benefit and for their contribution to the existing character of the landscape and region. The existing visual resource inventory is then compared with the project features, and any potential conflicts or impacts to existing visual resources are identified. If a change in character is identified, it is compared to viewers' expected sensitivity level and expectations, and is reviewed for consistency with relevant planning policies.

Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. The project area's landscape is

divided into landscape units to provide a framework for comparison of visual effects of a highway construction project. In the project corridor there is one essential landscape unit that can be identified: the Valley agricultural landscape unit. The predominant visual resources of the Valley agricultural visual assessment unit are the valley and bluff landforms, the river, croplands, agriculture, railroad line, bridges, and median oleander that form the landscape. This landscape unit is characterized by:

- Flat topography
- River bluffs
- A generally flat and straight road
- Vast fields comprising agricultural crops and grazing land
- Sparse residential or commercial development
- Isolated groves of trees, usually associated with areas of higher concentration uses
- Roadsides having little or no highway plantings
- Roadway median planted with oleander.

Viewshed

While the this landscape unit establishes the general visual environment of a project, the precise limits of the visual environment can be defined by mapping the project viewshed, which is the surface area visible from a given viewpoint or series of viewpoints, or the area from which that viewpoint may be seen. The viewshed of this project is typical of views of the Valley agricultural landscape unit and is represented at the San Joaquin River Bridge and Avenue 7 at these viewpoints. See Appendix H for the following viewpoint photos:

- Viewpoint 1 and A – the San Joaquin River Bridge located at the Fresno/Madera county line.
- Viewpoint 2 and B – Avenue 7 interchange located in Madera County.

Viewer Groups

Physical factors such as a viewer's location, speed of passage through an area, and familiarity with an area modify individuals' visual perception. These factors can be used to separate viewers into different user groups. There are two viewer groups in this landscape unit; those with views *from* the road (the highway user) and those with views *of* the road (the highway neighbors). The highway users in this corridor are

comprised of daily commuters in the Fresno/Madera region, big-rig truckers, tourists, local residents, and recreational users at the San Joaquin River Parkway.

Viewer sensitivity is defined both as the viewer's concern for scenic quality and the viewer's response to change in the visual resources that make up the view. For this project, the number of people viewing the road from off-site locations is substantially fewer than those who would see the project while on the highway, due in part to the vertical alignment of the road being below grade in some areas.

Visual Quality Evaluation Rating

A Visual Quality Evaluation was performed to rate the visual quality of the project area prior to construction of the project and after construction activities. Views from the road and views of the road were considered. Visual quality is evaluated by the following three criteria:

- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements.
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole.

Unlike the urbanized State Route 99 corridor to the south, the project corridor is rural/agricultural in character and does not have numerous constructed elements such as billboards, or visible utilities, storage yards, and railroad equipment. Therefore, the lack of sporadic intrusions increases the intactness of the visual quality in this corridor. The sparse highway planting of eucalyptus trees in this area screens a minor portion of the views, which increases the rating for unity and vividness from moderately low to average.

The Visual Quality Evaluation indicates that the area around the San Joaquin River (viewpoints 1 and A) possesses the most visual quality of the project area, thus earning the visual quality for this area a moderately high rating. The oleanders that function as visual screens account for most of the vividness and unity rating, therefore the project area ranks high in unity and intactness.

A numerical rating system is assigned to the existing visual quality and proposed quality of a viewpoint based on the three criteria discussed. Each viewpoint was rated

between 1 and 7, with 1 being the lowest value and 7 the highest. The numerical difference between the existing and proposed condition viewpoints is shown below in Table 2.6.

Table 2.6 Visual Quality Evaluation Ratings

Viewpoint	Existing Visual Quality	Visual Quality After Project	Change in Quality
From Road			
1-San Joaquin River Bridge	5.0	5.0	0.0
2-Avenue 7	4.8	4.2	-0.6
Of Road			
A-San Joaquin River Bridge	5.1	5.1	0.0
B-Avenue 7	4.3	3.3	-1.0

Environmental Consequences

The Island Park Six-Lane Project is one of many projects that would widen the State Route 99 corridor from four to six lanes. Although this project proposes retention of the existing median oleander within 1.3 miles within Fresno County, the 1.6 miles of median oleander in Madera County would be removed as well as three mature eucalyptus tress that are established highway planting. The oleander would be removed to allow for lane widening to the median. The eucalyptus would be removed to meet the 30-foot setback from the edge of travel way for trees established for a Clear Recovery Zone, as outlined in the Highway Design Manual.

The areas without existing oleander or where oleander would be removed would have a single concrete median barrier installed. Replacement of highway planting for future capacity-increasing projects is addressed in Caltrans policy. Current policy requires replacement of any highway planting removed or damaged as a result of construction activity.

Caltrans, working with communities from Bakersfield to Stockton, including Fresno and Madera counties, have developed a planning document to improve the State Route 99 corridor through their communities. The goal of the Route 99 Corridor Enhancement Master Plan is to strengthen community identity and unify freeway planting. Refer to Figure 2-2 for visual simulations prepared by Caltrans landscape architecture.

Existing

Simulation

Figure 2-2 Visual Simulation

The State Route 99 Corridor Enhancement Master Plan identifies the median oleander shrubs and the eucalyptus trees along the State Route 99 corridor as an important symbol of the corridor and reiterates the need to preserve the existing highway planting. This aesthetic and symbolic landscape also serves to control dust and erosion, provide fire and weed control, delineate the route, and provide headlight screening. In order to address imminent capacity needs that have potential to cause removal of existing highway planting, the Master Plan identifies methods to ensure the environmental integrity of the State Route 99 corridor. Caltrans' policy is to restore or replace the landscape following roadway construction projects.

The Highway 99 Beautification Master Plan also addresses the aesthetics of State Route 99 specifically through Fresno County. This plan identifies important key points along the corridor that should receive visual enhancement.

The San Joaquin River Bridge is highly visible to all users of the San Joaquin River Parkway at Camp Pashayan. Viewer response to any change in the bridge design affecting the views of the river is expected to be moderate. If a replacement bridge barrier would be approximately the same height of the existing barrier, visual impact is anticipated to be low. If there is an increase in height from the existing barrier, the visual impact is anticipated to be moderate.

The visual resource change considered together with the viewer responses to the change results in a moderate visual impact. Moderate visual impacts are defined when there is a moderate adverse change to the existing visual resource, with moderate viewer response to the change.

Avoidance, Minimization, and/or Mitigation Measures

Replacement planting must be funded from the highway construction project and must be under construction within two years of the acceptance of the highway contract that removed the highway planting.

In addition, the following measures would avoid and/or minimize visual impacts:

- Minimize the effect of removal of median oleander and highway planting of eucalyptus trees by providing funds for replacement planting within the project area in accordance with established Caltrans policy for such planting. Additionally, since the potential for headlight glare to oncoming traffic is increased with removal of the oleanders, installation of concrete median

barriers high enough to shield the majority of oncoming headlight glare would be an important consideration for this project.

- Minimize the urban look of the concrete barriers by staining the barriers to visually match the color and incorporate any architectural details of the existing concrete median barrier through the City of Fresno and Madera County.
- Minimize obstruction of views from the San Joaquin River Bridge by providing a bridge barrier at the lowest possible height, within the limits of sound engineering judgment and traffic safety requirements. Designing a bridge barrier that allows visual access through the barrier can also accomplish this objective.
- Minimize visual inconsistencies and encroachment on the San Joaquin River Parkway recreational area by providing a bridge design rural in character. This can be accomplished by using the same or similar deck design as the existing steel deck truss bridge or architectural features in keeping with a rural environment. Without either construction of a rural-type design or incorporation of architectural features in keeping with the rural environment, there will likely be a visual impact to users of the San Joaquin River Parkway.

Cumulative Impacts

This project is one of many projects that would widen State Route 99 from four to six lanes. Future widening is anticipated to change the character of the roadway from rural to urban along the entire corridor. In rural areas, this design would not be expected and is likely to be visually incompatible within its context. Proper planning should accompany future roadway widening projects to allow the preservation of existing vegetation where possible, and replacement planting where vegetation removal is imminent.

This project would not cause a cumulatively considerable impact after project-level mitigation is in place.

2.1.8 Cultural Resources

Regulatory Setting

"Cultural resources" as used in this document refers to historic and archaeological resources. The primary federal laws dealing with historic and archaeological resources include the following:

The National Historic Preservation Act, as amended, 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 the National Historic Preservation Act 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 Code of Federal Regulations 800). On January 1, 2004, a Section 106 Programmatic Agreement among the Advisory Council, the Federal Highway Administration, the State Historic Preservation Officer, and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement implements the Advisory Council's regulations, 36 Code of Federal Regulations 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

The Archaeological Resources Protection Act applies when a project may involve archaeological resources located on federal or tribal land. This act requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B for specific information regarding Section 4(f).

Historical resources are considered under the California Environmental Quality Act, as well as California Public Resources Code Section 5024.1, which established the California Register of Historical Resources. Section 5024 of the Public Resources Code 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. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

An Archaeological Survey Report and a Historic Property Survey Report were prepared by Caltrans in June 2008 for the project. An archaeological survey was conducted within the proposed right-of-way along the western side of State Route 99 in Fresno and Madera counties, including the proposed locations identified for placement of the detention basins. A single historic-era archaeological site was recorded and later identified as the remains of a gravel company that was in service between 1913 and the 1960's. This site is located southwest of the San Joaquin River Bridge, and within one of the previously proposed sites for a basin. This site was determined to be exempt from evaluation as specified by Caltrans' Section 106 Programmatic Agreement.

The project area lies within the territory that is generally accepted as being the historic home of the Southern Valley Yokuts. Record searches through the Southern San Joaquin Valley Information Center, California State University, Bakersfield, indicated two village sites within a one-mile radius of the study area. The Hoyumne Yokuts village site of Chayouis is located one-half mile west of the project area along the northern bank of the San Joaquin River. The Pitkachi Yokuts village site of Kohuo is situated one-half mile to the east of the study area along the southern bank of the river.

Environmental Consequences

New right-of-way would be acquired along the western edge of State Route 99 between the Herndon Avenue overcrossing and a vineyard on the north side of the San Joaquin River. Two biofiltration swales would be constructed on opposing banks of the San Joaquin River along the western flank of the project area. The biofiltration swale south of the San Joaquin River would be roughly 400 feet long and about 34 feet wide. The biofiltration swale north of the river would be about 420 feet long and 32 feet wide. In addition, new right-of-way would be acquired just north of Avenue 7 to accommodate the placement of an infiltration basin. New right-of-way could extend between 114 feet and 656 feet westward from the present right-of-way and would be determined in the final design phase of the project. No cultural material was observed during the Extended Phase I investigations of these locations.

One architectural resource was determined not eligible for listing on the National Register of Historic Places. No historic properties (resources eligible for listing on the National Register of Historic Places) were found within the Area of Potential Effects

of the undertaking; a finding of "no historic properties affected' was presented to the consulting parties. The Historic Property Survey Report was issued to the Department of Parks and Recreation on September 26, 2008. No correspondence has been received from the State Historic Preservation Office (part of the Department of Parks and Recreation) during the 30-day review period. As specified in the Section 106 Programmatic Agreement (Stipulation VIII. C.5.a), Caltrans assumed State Historic Preservation Office concurrence with Caltrans' determination of ineligibility of the architectural property evaluated for listing on the National Register of Historic Places in the context of the undertaking. Also, State Historic Preservation Office concurrence on the effect finding of "no historic properties affected" is understood. The Historic Property Survey Report was also sent to the other consulting parties during the formal 30-day comment period in November 2008.

Avoidance, Minimization, and/or Mitigation Measures

All four areas of planned excavation for the construction of the biofiltration swales, the infiltration basin and the removal of the San Joaquin River Bridge would be monitored by the Caltrans archaeologist.

If cultural materials were discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist could assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, then the coroner would notify the Native American Heritage Commission, who would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact Mandy Marine, Caltrans Native American Coordinator, so that she may work with the Most Likely Descendent 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 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as "the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year." An encroachment is defined as "an action within the limits of the base floodplain."

Affected Environment

A location hydraulic study was completed in March 2008 to determine if there would be base floodplain encroachments from the project.

Roadway water north of the Grantland overcrossing is captured and directed northward, eventually going to the San Joaquin River. Roadway water immediately north of the San Joaquin River flows south to the river. There are deck drains on the San Joaquin River Bridge, and these deck drains flow directly into the river. In the vicinity of Avenue 7, State Route 99 roadway water is stored in three basins. One basin is on the northbound side of State Route 99, south of Avenue 7 and west of the railroad. Another basin is on the southbound side of State Route 99, immediately north of Avenue 7, and the third basin is on the southbound side of State Route 99, between the southbound off-ramp and the southbound on-ramp. None of these basins requires pumping.

General rain floods can occur in Fresno anytime from November through April. Flooding is more severe when rain has already caused saturated ground conditions, when the ground is very cold and infiltration is minimal, or when rain or snowmelt in the high elevations on the east side adds to runoff.

Thunderstorms (cloudbursts) sometimes lasting as long as 3 hours can occur anytime from early fall to late spring, and may occur as an extremely severe sequence within a general rainstorm. Cloudbursts are high-intensity storms that can produce floods characterized by high peak flows, short duration of high water flows, and small volume of runoff. In some areas of Fresno County, especially where drainage basins are small, cloudbursts can produce peak flows substantially larger than those of general rainstorms. Cloudburst storms usually cover small areas and would not affect high water flows or flood stage on the San Joaquin River. Generally, only the upper reaches of the smaller streams are affected by cloudbursts.

According to the location hydraulic study, based on the Department of Water Resources, ground water levels are determined to be deeper than 60 feet below ground, for the three nearest ground water wells in the vicinity of the San Joaquin River. The well uses are undetermined, and the ground water levels appear to be generally going down. The basin at the Herndon Canal appears to be over 10 feet deep relative to original ground. The basins at Avenue 7 appear to be 3 feet or more below original ground.

The Flood Insurance Rate Maps were evaluated to determine if any portion of the proposed project is in an area that could be subject to flooding. Most of the project is designated as being in Other Areas Zone X, which is defined as "Areas determined to be outside 500-year floodplain." The portion of the project that lies within the 100-year floodplain is where it crosses the San Joaquin River.

The 100-year flood has been adopted by the Federal Emergency Management Agency as the base flood for floodplain management purposes. The 100-year flood has a 1 percent chance of being equaled or exceeded during any year. Although the occurrence interval represents the long-term average period between floods of specific magnitude, rare floods could occur at short intervals or even within the same year. Flood Insurance Studies and Flood Insurance Rate Maps were reviewed for the purposes of this study.

Environmental Consequences

The northern portion (Madera County side) of the San Joaquin River, where the river crosses State Route 99 is designated "Special Flood Hazard Areas Subject To Inundation By The 1 Percent Annual Chance Flood Event" Zone AE with "Base flood elevations determined." The zone is further described as "The 1 percent annual chance flood (100-year flood), also known as the base flood that has a 1 percent

chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1 percent annual chance flood." The southern portion (Fresno County side) of the river at the State Route 99 crossing is designated "Floodway areas in Zone AE," where "The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent annual chance flood can be carried away without substantial increases in flood heights."

There are no inhabited buildings and only one gazebo in the designated floodplain within the vicinity of the San Joaquin River Bridge. The gazebo is situated on the northbound side of State Route 99, south of the San Joaquin River floodway. Since the gazebo is far away from State Route 99, any bridgework would not affect it.

At this location, the San Joaquin River is a designated floodway so the project is prohibited from creating a backwater. Backwater is the resulting rise in elevation of the water surface caused by an obstruction in the channel. The existing bridge design creates a certain amount of backwater, however the new bridge structure would be designed so it would not cause any additional backwater. The Island Park Six-Lane Project would not substantially affect the hydrology present in the project area and does not constitute a significant floodplain encroachment as defined in Code of Federal Regulations (CFR) Title 23 Section 650.105.

Avoidance, Minimization, and/or Mitigation Measures

Two new biofiltration swales to the west of the San Joaquin River Bridge will provide storm water management treatment measures for this project. In addition, an infiltration basin will be constructed north of the Avenue 7 overcrossing and west of State Route 99. The existing basin located south of Avenue 7 and east of State Route 99 will be further excavated to accommodate additional runoff from the project. No substantial flooding concerns exist within the project limits. Roadway drainage facilities would be expanded to accommodate the proposed roadwork. There are no substantial floodplain impacts anticipated from this project.

2.2.2 Water Quality and Storm Water Runoff

Regulatory Setting

Section 401 of the Clean Water Act requires water quality certification from the State Water Resources Control Board or from a Regional Water Quality Control Board

when the project requires a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers to dredge or fill within a water of the United States.

Along with Section 401 of the Clean Water Act, Section 402 of the Clean Water Act establishes the National Pollutant Discharge Elimination System permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the National Pollutant Discharge Elimination System program to the State Water Resources Control Board and nine Regional Water Quality Control Boards. The State Water Resources Control Board and Regional Water Quality Control Boards also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The State Water Resources Control Board has developed and issued a statewide National Pollutant Discharge Elimination System permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the State Water Resources Control Board's Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan to be prepared and implemented during construction. Caltrans activities of less than 1 acre require a Water Pollution Control Program.

Affected Environment

A water quality assessment for the project was completed in April 2008. The purpose of the assessment was to evaluate potential project impacts on surface and groundwater quality and to describe mitigation measures to reduce potential impacts.

Surface Watercourses

Surface watercourses within the project limits are the southern portion of the San Joaquin Valley Floor Hydraulic Unit 545.20 and the northern portion of the San Joaquin Valley Floor Hydraulic Unit 551.30. The major surface waters of the area are the San Joaquin River and the Herndon Canal. Flows in the San Joaquin River are directed toward the ocean from the Sierra Nevada to the San Joaquin Delta in the San Francisco Bay Area.

A regional analysis of surface water quality in the project area was conducted by the United States Geological Survey through the National Water Quality Assessment

from 1992 through 1997 for the San Joaquin and Tulare Basins. The study concluded that degradation of Central Valley water quality was related to pesticides, nutrient concentrations, mineralization, agricultural pollutants, abandoned mines, and urban pollutants.

Section 303 of the Clean Water Act requires states to identify surface waters that have been impaired. The San Joaquin River is included in the 303(d) list as being impaired, and according to the 2006 303d list the pollutant of concern is exotic species while the source of the pollutants is characterized as being agricultural.

Groundwater

The project is located in parts of the southern portion of the Madera groundwater subbasin, and the northern portion of the Kings groundwater subbasin. The majority of the project lies within the Kings groundwater subbasin, which is bounded by the San Joaquin River. The San Joaquin and Kings rivers are the two principal rivers within or bordering the subbasin. The Fresno Slough and James Bypass are along the western edge of the subbasin and connect the Kings River with the San Joaquin River.

Groundwater quality conditions of the San Joaquin River vary throughout the area. This discussion is limited to parameters that are associated with regional problems. The groundwater is predominantly of bicarbonate type including major chemical elements such as calcium, magnesium, and sodium. Sodium appears higher in the western portion of the subbasin where some chloride waters are found.

Dibromochloropropane (DBCP), a soil fumigant nematicide, and nitrates can be found in groundwater along the eastern side of the subbasin, while shallow brackish groundwater can be found along the western portion of the subbasin. Elevated concentrations of fluoride, boron, and sodium can be found in localized areas of the subbasin. Most groundwater contamination sites are small and seldom affect water quality supplies on a regional basis.

The project area lies within the Fresno Sole Source Aquifer, which is an underground water system that supplies drinking water to many communities in the San Joaquin Valley. The project is not anticipated to have any substantial impacts on the aquifer.

Environmental Consequences

Potential sources of water pollution associated with this project include runoff containing sediment from soil erosion, petroleum and wear products from motor vehicle operation, landscaping chemicals, and hazardous materials spilled in highway accidents. Transport of these materials off-site would usually occur from rainfall runoff.

Sediment is produced when soil particles erode from the land and enter surface waters. Erosion around bridge structures, road pavements, and drainage ditches can damage and weaken these structures. Oils and grease are leaked onto road surfaces from car and truck engines, spilled at fueling stations, and discarded directly onto pavement or into storm sewers instead of being taking directly to recycling stations. Rain transports these pollutants directly to surface waters.

Heavy metals can come from "natural" sources, but can also come from car and truck exhaust, worn tires and engine parts, brake linings, weathered paint, and dust. Heavy metals are toxic to aquatic life and can potentially contaminate ground water.

Lead is present in the soil as a result of engine exhaust from vehicles using lead gasoline as fuel. Studies conducted by Caltrans Hazardous Waste Investigation unit have indicated that aerially deposited lead contamination can exist within the existing right-of-way of the project. The risk of high levels of lead in soils is primarily to human exposure during construction and operation of the highway. The risk to water quality is minimal, since during construction all runoff water would be prevented from flowing into a nearby water body. The hazardous waste initial site assessment determined that within the project right-of-way, no hazardous concentrations of lead were found.

Currently, stormwater discharges from the bridge deck directly to the San Joaquin River. Two biofiltration swales to the west of the San Joaquin River Bridge would be constructed for storm water management treatment measures for this project. A biofiltration swale is a vegetated channel designed to receive and convey storm water flows while meeting water quality criteria and other flow criteria. Pollutants are removed by filtration through the vegetation, uptake by plant biomass, sedimentation, absorption to soil particles, and infiltration through the soil. Pollutant removal capability is related to channel dimensions, longitudinal slope, and type of vegetation. These biofitration swales would allow sequential sediment settling while also

resulting in reduced right-of-way acquisition, reduced riparian habitat removal, and could be more atheistically pleasing than the previously proposed basins.

Short-term impacts to surface water quality could occur during construction of this project due to exposure to soil loosened during excavation, grading, and filling activities. These short-term water quality impacts are minor and would not cause or substantially contribute to the impairment of a designated beneficial use.

Long-term water quality impacts include minor increases in impervious surfaces resulting from tapering of shoulders around bridges, intersection realignments, change in erosion patterns, and surface water velocity are anticipated.

Construction activities from this project are not expected to intercept or alter groundwater recharge, discharge, flow conditions or groundwater quality.

Avoidance, Minimization, and/or Mitigation Measures

The project would have direct construction within the San Joaquin River. Management measures and best management practices would be needed to address water quality impacts during planning, design, construction, and operational and maintenance stages. Management measures include the following:

- Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss.
- Limit land disturbances such as clearing and grading and cut/fill to reduce erosion and sediment loss.
- Limit disturbance of natural drainage features and vegetation.
- Place bridge structures so that sensitive and valuable aquatic ecosystems are protected.
- Prepare and implement an approved Storm Water Pollution Prevention Plan.
- Ensure proper storage and disposal of toxic material.
- Incorporate pollution prevention into operation and maintenance procedures to reduce pollutant loadings to surface runoff.
- Develop and implement runoff pollution controls for existing road systems to reduce pollutant concentrations and volumes.

The selection of best management practices depends on the specific circumstances and conditions in the project area. Storm water best management practices are selected for each project during the preparation of the Storm Water Pollution

Prevention Plan. Best management practices are applied to meet the maximum extent practicable and best conventional technology/best available technology requirements to comply with water quality standards.

The project would need to comply with the requirements specified in the Caltrans Standard Specifications Section 7, Legal Relations and Responsibility, subsection 7-1.01G. When disturbed acreage is 1 acre or more, Caltrans' National Pollutant Discharge Elimination System Permit requires coordination with the Regional Water Quality Control Board. This project is expected to disturb more than 1 acre of soil, and would require the following:

1. A Notification of Construction is to be submitted to the appropriate regional water quality control board at least 30 days prior to the start of construction.
2. A Storm Water Pollution Prevention Plan is to be prepared prior to and implemented during construction to the satisfaction of the resident engineer.
3. A Notice of Completion of Construction is to be submitted to the regional water quality control board upon completion of the construction and stabilization of the site.

2.2.3 Paleontology

Regulatory Setting

Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects. (e.g., Antiquities Act of 1906 [16 USC 431-433], Federal-Aid Highway Act of 1935 [20 USC 78]). Under California law, paleontological resources are protected by the California Environmental Quality Act, the California Code of Regulations, Title 14, Division 3, Chapter 1, Sections 4307 and 4309, and Public Resources Code Section 5097.5.

Affected Environment

A paleontological identification report was prepared in October 2008. The ground surface of the project vicinity varies from flat at the northern and southern project boundaries to steep river bluffs along the San Joaquin River. The project area is located on the San Joaquin River alluvial fan within the San Joaquin Valley. The

alluvial fan consists of rock debris deposited by the San Joaquin River and adjacent smaller streams, all of which drain from the foothills of the Sierra Nevada. The gravel, sand, and silt that compose these alluvial deposits have in the past produced significant fossils, primarily large land mammals such as mammoths, mastodons, camels, bison, and horses.

Stratigraphic units within the project area include the Early to Middle Pleistocene Turlock Lake Formation, Middle Pleistocene Riverbank Formation and the Quaternary Alluvium. Vertebrate and invertebrate fossils have been found in both Turlock Lake and Riverbank formations in the project vicinity in the past.

A field survey, which included visual inspection of areas with exposures that might reasonably be predicted to contain fossils in the project area, was conducted to document the presence of sediments suitable for containing fossil remains and the presence of any previously unrecorded fossil sites. The survey reported a high potential rating for these sediments to contain fossils. Although no fossil localities are reported within the project right-of-way, the presence of fossils in sediments of the Turlock Lake and Riverbank formations elsewhere in the area suggests that there is a high potential for additional similar fossil remains to be uncovered by excavations during project construction.

Fossil remains salvaged during project construction could provide a more comprehensive documentation of the diversity of animal and plant life that once existed in Fresno and Madera counties and could result in a more accurate reconstruction of the geologic and paleobiologic history of the San Joaquin Valley.

Environmental Consequences

This project would excavate two biofiltration swales, one infiltration basin, and deepen an existing basin within the project limits. Potential impacts on paleontological resources resulting from construction of the project would primarily involve terrain modification. These impacts could result from vegetation clearing, grading, widening of road cuts, and any other earth-moving activity that disturbs or buries previously undisturbed fossiliferous sediments, making those sediments and their paleontological resources unavailable for future scientific investigation.

Avoidance, Minimization, and/or Mitigation Measures

Before construction, mitigation measures outlined in the Paleontological Evaluation Report would be implemented to reduce potential adverse impacts to substantial

paleontological resources resulting from construction. In areas determined to have a high potential for substantial paleontological resources, an adequate program for mitigating the impact of development should include:

- A preliminary survey and surface salvage prior to construction.
- Monitoring and salvage during excavation.
- Preparation, such as screen washing to recover small specimens (if applicable), and specimen preparation to a point of stabilization and identification.
- Identification, cataloging, curation, and storage of specimens.
- Preparation of a final report of the finds and their significance, after all operations are complete.

The site-specific Paleontological Mitigation Plan would assist Caltrans in complying with environmental laws and regulations requiring mitigation of impacts on paleontological macrofossil resources if found within the project. A preliminary plan has been developed and the components of the Paleontological Mitigation Plan are:

- A qualified principal paleontologist (M.S. or Ph.D. in paleontology or geology familiar with paleontological procedures and techniques) would be retained to be present at pre-grading meetings to consult with grading and excavation contractors.
- A paleontological monitor, under the direction of the qualified principal paleontologist, would be on-site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations.
- If fossils are discovered, the paleontologist (or paleontological monitor) would recover them. Construction work in these areas would be halted or diverted to allow recovery of fossil remains in a timely manner.
- Fossil remains collected during the monitoring and salvage portion of the mitigation program would be cleaned, repaired, sorted, and cataloged.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, would then be deposited in a scientific institution with paleontological collections.
- A final report would be completed that outlines the results of the mitigation program.

2.2.4 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 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980. The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include the following:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

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

An Initial Site Investigation was completed in April 2008 to determine the potential presence of hazardous materials within the project limits. The project would reconstruct the San Joaquin River Bridge and construct three new storm water treatment measures outside of the Caltrans right-of-way The project area is mostly rural and includes aboveground and underground utilities. The Union Pacific Railroad has a line that runs to the east of the project and parallels the freeway. The Initial Site Investigation recommended additional investigation (Preliminary Site Assessment) for the following areas:

- Biofiltration swale site south of the San Joaquin River: JFJ Farms parcel (APN 504-130-07) west of State Route 99.
- Anticipated right of way or easement: Aquarius Aquarium Institute parcel (APN 504-130-31) adjacent to the JFJ Farms parcel.
- The San Joaquin River Bridge

A preliminary site assessment and asbestos/lead evaluation of the San Joaquin River Bridge was completed in September 2008 for the project.

One of the biofiltration swales will be located south of the San Joaquin River to the west of State Route 99. Adjacent to this area is an area that constitutes the remains of a gravel quarry operated by the California Road and Street Improvement Company (formerly the Worswick Street Paving Company) of Fresno. The quarry started operating in 1913 and was in continued use from 1937 until 1961. Based on past history, petroleum hydrocarbon impacts and unknown buried objects are suspected. The surface of the area is typically flat and covered by grasses and weeds. Soil containing asphalt emulsion is present at scattered locations across the parcel. Additional broken concrete, asphalt emulsion rubble, bricks, rebar, and similar construction debris are present along the surface of the northwestern portion of the parcel.

Environmental Consequences

Biofiltration Swales

Based on the Preliminary Site Assessment results, the parcel area for the biofiltration swale located south of the San Joaquin River does not appear to be heavily affected by petroleum hydrocarbons, a conclusion supported by the presence of low to moderate concentrations of petroleum hydrocarbons as diesel and motor oil in the shallow fill materials of the area. Discolored asphalt emulsion-cemented soil with

construction debris was observed from the surface to a depth of 3 to 4 feet in 13 of the 22 trenches excavated for studies in the area. The survey confirmed the presence of fill containing reinforced concrete and metal debris, predominantly along the slope adjacent to the San Joaquin River.

San Joaquin River Bridge

The paint on the San Joaquin River Bridge is intact and considered Category II (intact lead-painted architectural components such as doors, windows, framework, cladding, and trim). The lead paint survey consisted of a total of two bulk paint samples that were collected from the bridge. A paint sample representing intact brown paint used on the east (northbound) truss and girder systems exhibited a total lead concentration of 1,900 mg/kg and a soluble lead concentration of less than 0.42 mg/l. A paint sample representing intact gray paint used on the west (southbound) truss and girder systems exhibited a total lead concentration of 480,000 mg/kg and a soluble lead concentration of 1,300 mg/l.

An asbestos evaluation was completed of the San Joaquin River Bridge. Asbestos was not detected in samples collected during the survey.

Avoidance, Minimization, and/or Mitigation Measures

Biofiltration Swales

Where excavated soil materials require off-site disposal, then the asphalt emulsion/debris-containing fill materials would be considered non-hazardous for waste disposal purposes. The contractor would be provided with a copy of the preliminary site investigation report for estimating disposal costs and for submittal to a landfill or other accepting facility for disclosure and material acceptance.

Shallow soil excavated from this area would be suitable for reuse as structural fill within the highway corridor. Unsuitable metal and concrete debris materials would be segregated and appropriately disposed of. Fill materials containing asphalt emulsion would be placed outside of flood plain areas or beneath pavement and at least 5 feet above groundwater.

A health and safety plan is recommended for this area in order to minimize worker exposure to petroleum hydrocarbons. Mitigation costs and fees may apply to this project. The appropriate Caltrans Standard Special Provisions would apply and be provided prior to construction activities. A permitting fee may be required by the Fresno County Environmental Health Department and the Central Valley Regional Water Quality Control Board.

San Joaquin River Bridge

The paint on the bridge is intact and considered Category II. The contractor shall be responsible for informing the landfill of the contractor's intent to dispose of architectural components containing intact lead-based paint. Specific specifications will be indicated in the contract. It is recommended that all paints at the project location should be treated as lead containing for purposes of determining the applicability of the Cal/OSHA lead standard during any future maintenance, renovation, and demolition activities. Written notification to the San Joaquin Valley Air Pollution Control District is required 10 working days prior to beginning any demolition activity, in accordance with Regulation IV, Rule 4002.

2.2.5 Air Quality

Regulatory Setting

The Clean Air Act, as amended in 1990, is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the concentration of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards. Standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to the State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity is concerned with how well the region is meeting the standards set for carbon monoxide, nitrogen dioxide, ozone, and particulate matter. California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the Regional Transportation Plan, an air quality model is run to determine whether or not the implementation of those projects would conform to

emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as the Council of Fresno County Governments and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the Regional Transportation Plan is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the Regional Transportation Plan must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the Regional Transportation Plan, then the proposed project is deemed to meet regional conformity requirements for purposes of the project-level analysis.

Conformity at the project-level also requires "hot spot" analysis if an area is in "nonattainment" or "maintenance" for carbon monoxide (CO) and/or particulate matter. A region is a nonattainment area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called "maintenance" areas. Hot spot analysis is essentially the same, for technical purposes, as carbon monoxide or particulate matter analysis performed for National Environmental Policy Act and California Environmental Quality Act purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the carbon monoxide standard to be violated, and in nonattainment areas, the project must not cause any increase in the number and severity of violations. If a known carbon monoxide 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.

Affected Environment

An air quality report was prepared for the project in March 2009. The project lies in Fresno and Madera County in the San Joaquin Valley Air Basin.

Historical air quality data show that existing carbon monoxide levels for the project area and the general vicinity do not exceed either the state or federal Ambient Air Quality standards. The Fresno portion of the project is located in a federal attainment/maintenance area. The Madera portion of the project is located in a federal attainment area. The entire project would be located in a state attainment area. A screening carbon monoxide hot spot analysis was conducted. The results indicated that the project would not result in any local carbon monoxide emissions above regulatory level.

Fresno County

The project is fully funded and is in the 2007 Council of Fresno County Governments' Regional Transportation Plan, which was found to conform by the Council of Fresno County Governments on May 31, 2007, and Federal Highway Administration and Federal Transportation Administration adopted the air quality conformity finding on June 29, 2007. The project is also included in the Council of Fresno County Governments' financially constrained 2009 Interim Federal Transportation Improvement Program, Amendment #3, and page 2 of Appendix B - Regionally Significant Projects. The Council of Fresno County Governments' 2009 Interim Federal Transportation Improvement Program, Amendment #3, was found to conform by Federal Highway Administration and Federal Transportation Administration on February 27, 2009. The design concept and scope of the project is consistent with the project description in the 2007 Regional Transportation Plan, the 2009 Interim Regional Transportation Improvement Program, and the assumptions in the regional emissions analysis.

Madera County

The project is fully funded and is in the 2007 Madera County Regional Transportation Plan, which was found to conform by the Madera County Transportation Commission on May 23, 2007, and Federal Highway Administration and Federal Transportation Administration adopted the air quality conformity finding on June 29, 2007. The project is also included in the Madera County Transportation Commission's 2009 Interim Federal Transportation Improvement Program Amendment #3, page 41 of 80 – Regionally Significant Projects. The Madera County Transportation Commission's 2009 Interim Federal Transportation Improvement Program Amendment #3 was found to conform by Federal Highway Administration and Federal Transportation Administration on February 27, 2009. The design and scope of the project is consistent with the project description in the 2007 Regional Transportation Plan, the 2009 Interim Regional Transportation Improvement Program, and the assumption in the regional emissions analysis.

A regional conformity analysis covering the San Joaquin Valley for PM_{10}, carbon monoxide, and ozone was carried out. The analysis included not only this project but all reasonably foreseeable and financially constrained regionally significant projects for at least 20 years from the date the analysis was started. The analysis used the latest planning assumptions and the most recent emission models and appropriate analysis methods, as determined by interagency consultation on July 12, 2007. Based

on this analysis, the region would be in conformity with the State Implementation Plan, including this project, based on the emission budget and project number conformity test(s) and analysis procedures, as described in 40 CFR 93.109(l). The design concept and scope of the project are consistent with the project design concept and scope used in the regional conformity analysis.

Regional Air Quality Conformity

The Federal Clean Air Act requires that all transportation plans and programs pass the air quality conformity test. This process involves forecasting future emissions of air pollution to determine whether the amount of future pollution resulting from the plan or program would be within the allowable limit for motor vehicle emissions.

Transportation conformity must be determined for all nonattainment area pollutants classified as regional pollutants. In the San Joaquin Valley Air Basin, those pollutants are particulate matter, both PM_{10} and $PM_{2.5}$. Transportation projects also generate carbon monoxide, which is considered a localized pollutant. Carbon monoxide micro-scale modeling is required to determine whether a transportation project would cause or contribute to localized violations of carbon monoxide National Ambient Air Quality Standards.

Regional conformity must be determined based on a full study at least every 3 years. In California, it is determined at least every 2 years when the state-required Regional Transportation Plan updates are done. In addition, a new federal Transportation Improvement Program is required every 4 years, for which a conformity determination is required. Amendments to both the Regional Transportation Plan and Transportation Improvement Program between mandated conformity analyses also must have conformity demonstrated, including a full-scale revision of the regional analysis if regionally significant projects are added, deleted, or significantly modified.

Regional conformity is demonstrated by showing that the project is included in a conforming Regional Transportation Plan and Transportation Improvement Program with substantially the same design concept and scope that were used for the regional conformity analysis.

The improvements would be located in a non-attainment area for the federal and state particulate matter (PM_{10} and $PM_{2.5}$) standards. The project is located in a state non-attainment area for $PM_{10, but}$ is located in a federal attainment-maintenance area. Therefore, a project level hot spot analysis for PM_{10} and $PM_{2.5}$ conformity was

required. A qualitative $PM_{2.5}$ and PM_{10} analysis was conducted and submitted in June 2009 for interagency consultation as a "Project of Air Quality Concern". The interagency consultation partners, including the EPA and FHWA, concurred with the analysis on October 2, 2009. Caltrans received Project Level Air Conformity from the Federal Highway Administration in January 2010 (see Appendix K for Federal Highway Administration Air Conformity Letter. The preliminary results indicate that the project improvements would not result in any violation of federal standards. Compliance with San Joaquin Valley Unified Air Pollution Control District Rules and Regulations during construction would reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions to less than substantial. An improved Level of Service and progressively more stringent rules affecting diesel trucks is expected to reduce pollution from individual vehicles in future years.

The improvements would be located in a non-attainment area for the federal and state 8-hour ozone standards. Ozone is considered to be a regional pollutant. Currently there are no project-level analysis tools or approved guidelines. When projects are listed in an approved Regional Transportation Plan and associated conformity analysis, the projects are considered to be conforming to the State Implementation Plan for ozone.

Mobile source air toxics are a subset of the 188 air toxics defined in the Clean Air Act. They are now federally regulated under 40 Code of Federal Regulations 1502.22 by the U.S. Environmental Protection Agency. Mobile Source Air Toxics are 21 compounds emitted from highway vehicles and non-road equipment. The Federal Highway Administration issued interim guidance on February 3, 2006 for analysis in National Environmental Policy Act documents. Currently, available technical tools do not enable us to predict the project-specific health impacts; therefore only a qualitative analysis was conducted.

The limits of the project begin in Fresno County and extend northward into Madera County. Both Fresno and Madera counties are in the San Joaquin Valley, the southern portion of the great Central Valley of California. Fresno and Madera counties lie within the San Joaquin Valley Air Basin, which is bounded on the west by the Coast Ranges, on the east by the Sierra Nevada, and on the south by the Tehachapi Mountains.

The San Joaquin Valley is characterized by hot, dry summers and cool winters. The rainy season is typically between November and April, with the average annual rainfall ranging from 8 inches in the southern part of Fresno County to 18 inches in the northern part of Madera County. Snow is rare on the valley floor, though the Sierra Nevada range generally has heavy accumulations during the winter. Warm temperatures, prevailing winds and the location of the counties within an enclosed valley all play a role in the air quality of the area.

The project is located in the San Joaquin Valley Air Pollution Control District, which administers air quality regulations developed at the federal, state, and local levels. Pollutants such as carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead are considered to be local pollutants because they tend to accumulate in the air locally. Particulate matter is also considered a local pollutant. In the project area, particulate matter and carbon monoxide are of particular concern.

Federal Standards

Madera County is considered in attainment for carbon monoxide and non-attainment with respect to ozone. Fresno County is considered attainment/maintenance with respect to carbon monoxide, and non-attainment with respect to ozone and particulate matter. Both counties are in attainment/maintenance for PM_{10} and non-attainment for $PM_{2.5}$.

State Standards

Madera and Fresno counties are considered attainment/unclassified with respect to carbon monoxide and non-attainment with respect to ozone and particulate matter.

Project-level conformity

Project-level conformity is demonstrated by showing that the project would not cause the local area to exceed carbon monoxide and/or PM_{10} standards, and that it would not interfere with "timely implementation" of Transportation Control Measures called out in the State Implementation Plan.

The final rule has the following key elements:

- This rule requires that $PM_{2.5}$ hot spot analyses be performed only for new transportation projects with significant diesel traffic. Examples of such "projects of air quality concern" include intermodal freight or bus terminals, and major highway projects and congested intersections involving significant diesel traffic. No hot spot analyses would be required for most projects in $PM_{2.5}$ areas because

most projects are not an air quality concern. This final rule also streamlines existing PM_{10} hot spot requirements in a similar way.

- The streamlined approach in this final rule would ensure that transportation and air quality agencies in $PM_{2.5}$ and PM_{10} areas use their resources efficiently, while achieving clean air goals.

- In both $PM_{2.5}$ and PM_{10} areas, a quantitative hot spot analysis is not required until the Environmental Protection Agency issues a new motor vehicles emissions model capable of estimating local emissions as well as future hot-spot modeling guidance. Qualitative analyses would apply in the interim.

- This rule extends an existing flexibility by allowing the U.S. Department of Transportation to make "categorical hot spot findings," which waive $PM_{2.5}$ and PM_{10} hot spot reviews for categories of projects where modeling shows that there is no air quality concern.

Emissions Analyses

The data from two air pollution monitors in Fresno were reviewed for this project. The Fresno-Drummond monitor (4706 East Drummond Avenue) monitors PM_{10}, ozone and carbon monoxide. It is located approximately 22.9 miles from the project site. The Fresno-Winery monitor is located at 1716 Winery Avenue. This site monitors $PM_{2.5.}$ It is located along approximately 24.7 miles from the project site.

Table 2.7 summarizes the status of pollutants and identifies pollutants that do not meet state or federal standards.

Table 2.7 Air Quality Standards and Status

Pollutant	Averaging Time	State Standard	Federal Standard	State Status	Federal Status	Health and Atmospheric Effects	Typical Sources
Ozone (O_3)[a]	1 hour 8 hours	0.09 ppm 0.070 ppm	–[b] 0.08 ppm	Moderate non-attainment Non-attainment	Non-Attainment	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include a number of known toxic air contaminants.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROG) and nitrogen oxides (NO_x) in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes. Biologically produced ROG may also contribute.
Carbon Monoxide (CO)	1 hour 8 hours	20 ppm 9.0 ppm[c] 6 ppm	35 ppm 9 ppm –	Attainment	Attainment-Maintenance (Fresno County) Attainment (Madera County)	Asphyxiant. CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Respirable Particulate Matter (PM_{10})[a]	24 hours Annual	50 µg/m^3 20 µg/m^3	150 µg/m^3 –	Non-attainment	Non-Attainment	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources (wind-blown dust, ocean spray).
Fine Particulate Matter ($PM_{2.5}$)[a]	24 hours Annual	– 12 µg/m^3	35 µg/m^3 15 µg/m^3	Non-Attainment	Non-Attainment	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical

Pollutant	Averaging Time	State Standard	Federal Standard	State Status	Federal Status	Health and Atmospheric Effects	Typical Sources
						particulate matter – considered a toxic air contaminant – is in the $PM_{2.5}$ size range, as are many aerosol and solid compounds	(including photochemical) reactions involving other pollutants including NO_x, sulfur oxides (SO_x), ammonia, and ROG.
Nitrogen Dioxide (NO_2)	1 hour Annual	0.25 ppm –	– 0.053 ppm	Attainment	Attainment/ Unclassified	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain.	Motor vehicles and other mobile sources; refineries; industrial operations.
Sulfur Dioxide (SO_2)	1 hour 3 hours 24 hours Annual	0.25 ppm – 0.04 ppm –	– 0.5 ppm 0.14 ppm 0.030 ppm	Attainment	Unclassified	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing.
Lead (Pb)[d]	Monthly Quarterly	1.5 µg/m^3 –	– 1.5 µg/m^3	Attainment	NA	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also considered a toxic air contaminant.	Primary: lead-based industrial process like smelters. Past: lead paint, leaded gasoline. Moderate to high levels of aerially deposited lead from gasoline may still be present in soils along major roads, and can be a problem if large amounts of soil are disturbed.

Sources: California Air Resources Board Ambient Air Quality Standards chart, 05/17/2006 (http://www.arb.ca.gov/aqs/aaqs2.pdf)
Sonoma-Marin Area Rail Transit Draft Air Pollutant Standards and Effects table, November 2005, page 3-52.
U.S. EPA and California Air Resources Board air toxics websites, 05/17/2006

Notes: ppm = parts per million; µg/m^3 = micrograms per cubic meter

[a] Annual PM10 NAAQS revoked October 2006; was 50 µg/m^3. 24-hr. PM2.5 NAAQS tightened October 2006; was 65 µg/m^3.

[b] 12/22/2006 Federal court decision may affect applicability of Federal 1-hour ozone standard. Prior to 6/2005, the 1-hour standard was 0.12 ppm. Case is still in litigation.

[c] Rounding to an integer value is not allowed for the State 8-hour CO standard. A violation occurs at or above 9.05 ppm.

[d] The ARB has identified lead, vinyl chloride, and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM10 and, in larger proportion, PM2.5. Both the ARB and U.S. EPA have identified various organic compounds that are precursors to ozone and PM2.5 as toxic air contaminants. There is no threshold level of exposure for adverse health effect determined for toxic air contaminants, and control measures may apply at ambient concentrations below any criteria levels specified for these pollutants or the general categories of pollutants to which they belong.

Environmental Consequences

Project Level Analysis

A project that is located in a non-attainment or maintenance area for a given pollutant requires additional air quality analysis and reduction measures in regard to the pollutant. Hot spot analysis is most frequently done for carbon monoxide and particulate matter. Currently, there is no hot spot procedure for ozone, which is considered to be a regional pollutant.

Carbon Monoxide (CO) Analysis

The project is located in two counties. Fresno County is considered an attainment/maintenance area for the federal carbon monoxide, while Madera County is in attainment for the federal carbon monoxide standard. The nearest carbon monoxide monitor is at the Fresno Drummond Street site monitor, 22.9 miles west of the project. The maximum 8-hour average readings from this monitoring station during 2006 through 2008 ranged from 1.63 to 3.31 parts per million, below the standard of 9 parts per million. There have been no exceedances of this standard between 2005 and 2007.

The UC Davis Transportation Project-Level Carbon Monoxide Protocol, December 1997, was used to evaluate the potential carbon monoxide impact of this project. The qualitative evaluation flow chart in Guidelines in Chapters 3 and 4, and Level 7 were followed. Table 2.8 lists the questions the Protocol Section asks for the basis of deciding if any emission changes are acceptable:

Table 2.8 Transportation Project-Level Carbon Monoxide Protocol Questionnaire

Protocol Question	Answer
Does project significantly increase the percentage of vehicles operating in cold start mode?	No
Does project improve traffic flow?	Yes, levels of service would improve
Does the project move traffic closer to receptors?	No
Is project suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration?	No

Because of the above answers, the project is satisfactory and no further analysis needed.

Particulate Matter Analysis

A project-level conformity analysis was submitted to the Model Coordinating Committee in June 2009 (see Appendix K for Federal Highway Administration Air Conformity Letter). The Environmental Protection Agency's Transportation Conformity Guidance (final Rule), March 10, 2006 defines Projects of Air Quality Concern as 'new or expanded highway projects that have a significant number of or significant increase in diesel vehicles'.

A significant number is defined as:

- Greater than 125,000 Annual Average Daily Traffic and eight percent or more of such AADT is diesel truck traffic
- In practice, 10,000 truck AADT or more regardless of total AADT

A significant increase is defined in practice as a 10 percent increase in heavy-duty truck traffic. This project is considered to be a Project of Air Quality Concern as it has a diesel truck percentage of 24 percent, substantially higher than eight percent, in the horizon year of 2030. The project is located in a federal PM_{10} and $PM_{2.5}$ non-attainment area and requires a qualitative PM_{10} and $PM_{2.5}$ hot spot analysis under 40 Code of Federal Regulations 93.123(b)(1)(i).

The Fresno Pacific (Hamilton and Winery) site, located at 1716 Winery Avenue, is the nearest monitor that measures $PM_{2.5}$. It is located 24.7 miles southwest of the project site boundary. Although this monitor is geographically distant, its proximity to State Route 99 would reflect similar air quality conditions to those found at the project site.

As both PM_{10} and $PM_{2.5}$ readings reported between 2002 and 2007 have been below the standard, it is projected that the proposed project would not cause the area to exceed the particulate matter standards. Re-entrained dust must be considered part of the PM_{10} hot spot analysis. Methods used to minimize PM_{10} include the San Joaquin Valley Air Pollution Control District's Regulation VIII requirements, which should be effective as the vacant and agricultural lands continue to be developed for commercial and residential uses.

Re-entrained road dust (or dust that is suspended and being carried along in wind currents) is caused by a combination of vehicle traffic and some maintenance activities. The PM_{10} readings from the Fresno Winery site (the monitor with the most similar air quality conditions as the project site) reported the high national 24-hour average and national annual average below the standard for 2001 through 2006.

Since 2002, the PM_{10} national annual average readings have remained consistently below the 50-ug/m^3 standard. Under normal circumstances, there appears to be no reason to believe that the re-entrained road dust from the increased vehicle traffic would contribute to a future violation of the standard.

Mobile Source Air Toxics

In addition to the criteria air pollutants for which there are national ambient air quality standards, the Environmental Protection Agency also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (for example, airplanes), area sources (such as dry cleaners), and stationary sources (for example, factories or refineries).

Mobile source air toxics are a subset of the 188 air toxics defined by the Clean Air Act. The mobile source air toxics are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The Environmental Protection Agency is the lead federal agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of mobile source air toxics. The Environmental Protection Agency issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources. 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, Environmental Protection Agency examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline program, its national low emission vehicle standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements.

Unavailable Information for Project-Specific Mobile Source Air Toxics Impact Analysis: This air study includes a basic analysis of the likely mobile source air toxics emission impacts of this project. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the alternatives in this document. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

Information that is Unavailable or Incomplete. Evaluating the environmental and health impacts from mobile source air toxics on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the mobile source air toxics health impacts of this project.

- **Emissions:** The Environmental Protection Agency tools (MOBILE 6.2) to estimate mobile source air toxics emissions from motor vehicles cannot reliably be used to predict emissions resulting from highway projects. While MOBILE 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level.

  EMFAC 2007 was used to determine the emission factor for the spreadsheet tool. The projected annual average daily traffic counts used were for the highest annual average daily traffic counts of the three build options. The project parameters for current year, build/no-build scenarios for 2016 (build-out year) and 2036 were processed (see Table 2.9, based on grams per year)

Table 2.9. Mobile Source Air Toxics Current and Project Emissions

Pollutant	2006 (Base Year)	Operational				Horizon Year	
		2016 Build	2016 No-Build	2026 Build	2026 No-Build	2036 Build	2036 No-Build
Diesel PM	1020.19	572.04	438.53	256.01	239.53	241.66	225.25
Benzene	93.11	41.36	43.05	29.70	28.58	30.01	31.34
1,3,	15.95	6.68	7.07	5.07	4.75	5.24	5.62

Butadiene							
Acetaldehyde	97.64	53.7	55.7	31.11	31.26	30.73	30.73
Acrolein	3.17	1.25	1.33	1.01	0.93	1.04	1.14
Formaldehyde	216.81	115.97	120.48	69.10	68.98	68.51	68.48

The results indicated that the same trends for each pollutant for each scenario year. The six pollutants were highest in the base year (2006). The pollutants decreased in the year 2016, with no-build emissions greater than those predicted for the build scenario. In 2030, the projected emissions for the five mobile source air toxics are greater for the build scenario than for the no-build scenario. However, both the build and no-build emissions were still considerably lower than the base year emissions.

In its discussions of particulate matter (PM_{10} and $PM_{2.5}$) under the conformity rule, the EPA has identified that MOBILE 6.2 is limited in its ability to test for quantities of the pollutant. These limits make MOBILE 6.2's estimates of mobile source air toxics emissions unreliable. MOBILE 6.2 is an adequate tool for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but it is not sensitive enough to capture the effects of travel changes tied to smaller projects or to predict emissions near specific roadside locations.

- **Dispersion.** The tools to predict how mobile source air toxics disperse are also limited. The Environmental Protection Agency's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago to predict episodic concentrations of carbon monoxide as part of determining compliance with the National Ambient Air Quality Standards.

  The performance of dispersion models is more accurate for predicting maximum concentrations that can occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific highway project locations across an urban area to assess potential health risk. The National Cooperative Highway Research Program is conducting research on best practices in applying models and other technical methods in the analysis of mobile source air toxics. This work also would focus on identifying appropriate methods of documenting and communicating mobile source air toxics impacts in the National Environmental Protection Agency process and to the general public. Along with these general limitations of

dispersion models, the Federal Highway Administration lacks monitoring data in most areas necessary to establish project-specific mobile source air toxics background concentrations.

- **Exposure Levels and Health Effects.** Finally, even if emission levels and concentrations of mobile source air toxics could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis prevent us from reaching meaningful conclusions about project-specific health impacts.

  Exposure assessments are not reliable predictions because it is difficult to accurately calculate annual concentrations of these pollutants near roadways, and to determine a reasonable estimate of the time people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period.

- We are also not entirely sure that existing estimates of toxicity of the various mobile source air toxics are accurate, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of this, it is likely that the exposure differences calculated between alternatives could be entirely the result of uncertainty in the model. Consequently, the results of such assessments would not be useful to decision makers, who must weigh this information against other project impacts that are better suited for quantitative analysis.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of Mobile Source Air Toxics: Research into the health impacts of mobile source air toxics is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of Environmental Protection Agency efforts. Most notably, the agency conducted the National Air Toxics Assessment in 1996 to evaluate modeled estimates of human exposure applicable to the county level.

While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the National Air Toxics Assessment database best illustrate the levels of various toxics when aggregated to a national or state level.

The Environmental Protection Agency is in the process of assessing the risks of various kinds of exposures to these pollutants. The Environmental Protection Agency Integrated Risk Information System is a database of human health effects that may result from exposure to various substances found in the environment. The Integrated Risk Information System database is located at http://www.epa.gov/iris. The following toxicity information for the six prioritized mobile source air toxics was taken from the Integrated Risk Information System database Weight of Evidence Characterization summaries. This information is taken verbatim from Environmental Protection Agency's Integrated Risk Information System database and represents the agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- **Benzene** is characterized as a known human carcinogen.
- The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- **Formaldehyde** is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.
- **1,3-butadiene** is characterized as carcinogenic to humans by inhalation.
- **Acetaldehyde** is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- **Diesel exhaust** (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- **Diesel exhaust** also represents chronic respiratory effects, possibly the primary noncancer hazard from mobile source air toxics. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address mobile source air toxics health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by Environmental Protection Agency, Federal Highway Administration, and the

industry, has undertaken a major series of studies to research near-roadway mobile source air toxics hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Recent studies have reported that proximity to roadways is related to adverse health outcomes, particularly respiratory problems. Much of this research is not specific to mobile source air toxics, instead surveying the full spectrum of both criteria and other pollutants. The Federal Highway Administration cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Because of the uncertainties outlined previously, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of mobile source air toxic emissions from each of the project alternatives and mobile source air toxic concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives would have "significant adverse impacts on the human environment."

In this document, Caltrans has provided a quantitative analysis of mobile source air toxics emissions relative to the various alternatives, and has acknowledged that the project alternatives may result in increased exposure to mobile source air toxics emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

In summary, the Environmental Protection Agency projections indicate a continuing downward trend of the six primary mobile source air toxics. This differs somewhat from the University of California at Davis/Caltrans tool available that indicates that the mobile source air toxics emissions would start to increase again at the design year. As discussed, the study of mobile source air toxics, the exposure levels that cause

health problems and modeling tools are currently in a state where accurate information is incomplete or unavailable. This reduces our ability to make an accurate prediction of adverse effects on the human environment caused by this project. There is currently no accepted level of exposure that causes health problems. Without a defined level of significance for exposure, one cannot accurately and scientifically predict the effects on the human environment. Studies are currently being conducted to clarify some of these unknowns; however, the information is not available now.

Emission Control Measures (PM_{10} and $PM_{2.5}$)

According to the Environmental Protection Agency, the heavy-duty engine standards adopted in 2007 will result in the introduction of new, highly effective control technologies for heavy-duty engines. Particulate matter emission levels are expected to be 90 percent lower on a per-vehicle basis than standard levels for 2000, due to the diesel engine standards and fuel program beginning 2007. It will take time for the engine standards to have an effect due to the slow turnover rate of truck fleets. Lower- emitting diesel fuel standards should have an immediate effect.

The comparison between the build and no-build scenarios indicates that the build scenario would improve the State Route 99 level of service within the project area by decreasing congestion, reducing accident potential, and minimizing idling time for diesel trucks, while maintaining air quality. Vehicle miles traveled would be the same for the build and no-build scenarios.

This project is considered to be a Project of Air Quality Concern because diesel trucks make up 24 percent of the total vehicles on the roadway, considerably higher than the eight percent threshold in the horizon year of 2030. For the reasons stated earlier, no new or worsened PM_{10} and $PM_{2.5}$ violations of any standards are expected in the future. Therefore, the build and no-build alternatives are considered conforming projects under the PM_{10} and $PM_{2.5}$ conformity hot spot regulations. The project therefore complies with the PM_{10} and $PM_{2.5}$ control measures, as applicable, in the respective air quality plans.

The project is located in Fresno and Madera counties. In Fresno County, the project site is not located in any of the areas that have rock formations know to contain naturally occurring asbestos (serpentine and ultramafic rock), while Madera County is not known to have formations of serpentine rock. Therefore, the impact from naturally occurring asbestos during project construction would be minimal to none.

Short-Term Construction Impacts

Construction activity may cause a temporary increase in mobile source air toxics emissions. New technologies and practices should be included in any project-level construction emission minimization plan to help lower short-term mobile source air toxics. In addition the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU) has emphasized a host of diesel retrofit technologies in the law's Congestion Mitigation and Air Quality Improvement Program provisions—technologies that are designed to lessen a number of mobile source air toxics.

During construction, the project would generate air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors at some residences very close to the right-of-way would probably cause occasional annoyance and complaints.

Climate Change

Climate change is analyzed in Section 2.5 in this document. Neither Environmental Protection Agency (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 chapter of this environmental document and may be used to inform the National Environmental Policy Act 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 traveled.

Avoidance, Minimization, and/or Mitigation Measures

No substantial impacts are anticipated for criteria pollutants as a result of the improvements, and therefore no avoidance, minimization, and/or mitigation measures are required.

The contractor is responsible for complying with the rules and regulations of the Air Pollution Control District if structures that may contain asbestos require demolition.

The project would be subject to a Dust Control Permit from the San Joaquin Unified Air Pollution Control District. Observing the District's Regulation VIII requirements and the Caltrans Non-Standard Special Provisions for Dust should minimize the effect of dust during construction.

Caltrans Standard Specifications pertaining to dust control and dust palliative requirements are a required part of all construction contracts and should effectively reduce and control emission impacts during construction. Caltrans would require the contractor to submit Air District Rule 9510 Air Impact Analysis and pay any mitigation fees if required. The provisions of Caltrans Standard Specifications, Section 7-1/OF "Air Pollution Control" and Section 10 "Dust Control" require the contractor to comply with the San Joaquin Valley Air Pollution Control District's rules, ordinances, and regulations.

2.2.6 Noise and Vibration

Regulatory Setting

The National Environmental Policy Act of 1969 and the California Environmental Quality Act provide the broad basis for analyzing and abating the effects of highway traffic noise. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between the National Environmental Policy Act and the California Environmental Quality Act.

California Environmental Quality Act

The California Environmental Quality Act requires a strictly baseline versus build analysis to assess whether a proposed project would have a noise impact. If a proposed project is determined to have a significant noise impact under the California Environmental Quality Act, then the act dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 Code of Federal Regulations 772

For highway transportation projects with Federal Highway Administration involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 Code of Federal Regulations 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use under analysis. For example, the criterion for residences (67 decibels) is lower than the criterion for commercial areas (72 decibels). The following table lists the noise abatement criteria for use in the National Environmental Policy Act and 23 Code of Federal Regulations 772 analysis and Figure 2-3 shows the noise levels of typical activities.

Table 2.10 Activity Categories and Noise Abatement Criteria

Activity Category	Noise Abatement Criteria, A-weighted Noise Level, Leq (h)	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	--	Undeveloped lands
E	52 Interior	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Source: Caltrans Traffic Noise Analysis Manual, 1998
A-weighted decibels are adjusted to approximate the way humans perceive sound. Leq(h) is the steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual time-varying levels over one hour.

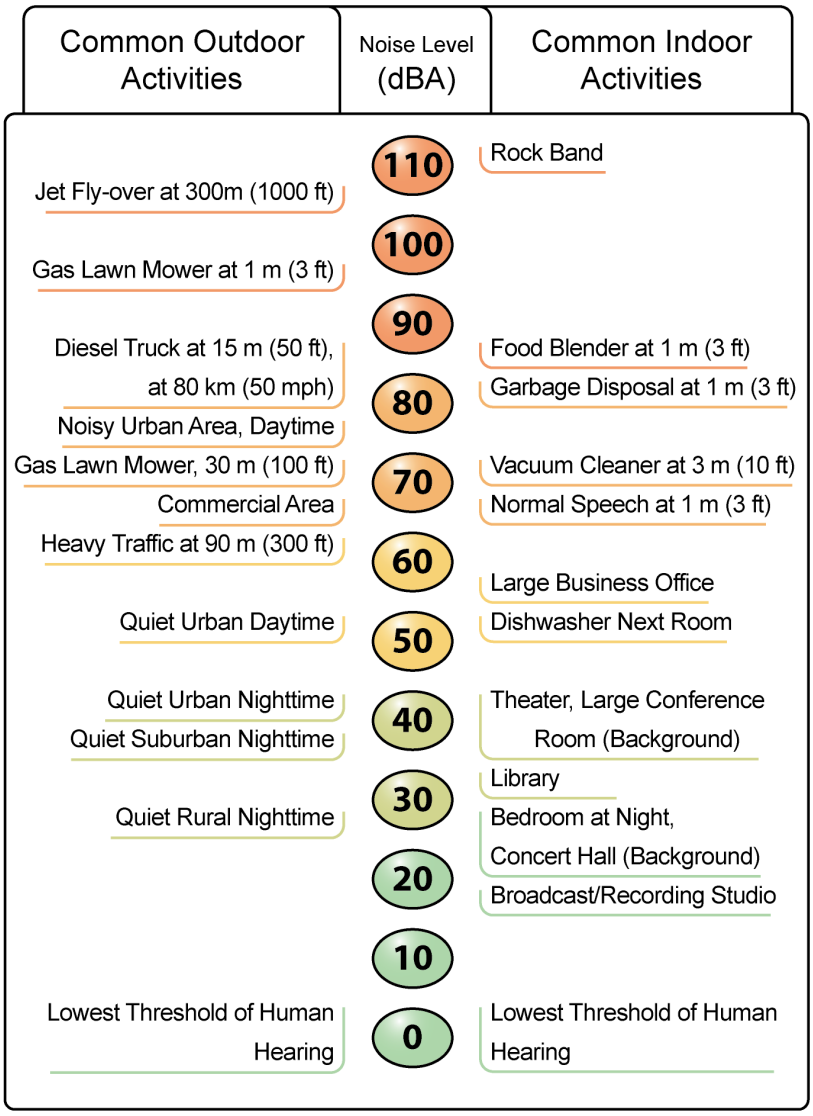


Figure 2-3 Typical Noise Levels

In accordance with Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-decibel or more increase) or when the future noise level with the project approaches or exceeds the noise abatement criteria. Approaching the noise abatement criteria is defined as coming within 1 decibel of the criteria.

If it is determined that the project would have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans' *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5-decibel reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources, and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include residents' acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978, and the cost per benefited residence.

Affected Environment

A noise study report was prepared in March 2009 for the project because it is a Type I project, which involves widening State Route 99 by adding two additional lanes between the Grantland undercrossing and the Avenue 7 overcrossing. The project area is mostly rural. The study identified one receiver located north of the Avenue 7 overcrossing to the west of State Route 99 that could potentially be affected by the project. The distance between the residence and the edge of the roadway is about 400 feet. The existing noise level at this location was measured in March 2009 and found to be 64.7 "dBA" or decibels A-weighted sound level.

Environmental Consequences under the National Environmental Policy Act

In accordance with the *Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Highway Reconstruction Projects* (CATNAP-California Department of Transportation, October, 1998), a noise level that approaches or exceeds 67 dBA requires noise abatement consideration. Table 2.11 shows that the existing level at this receiver is 64.7 dBA and the future build alternative would increase the noise level at this receiver to 66.4 dBA. The resulting noise level requires

consideration of noise abatement since it approaches the noise abatement criterion of 67 dBA for residences (see Table 2.10).

Table 2.11 Existing and Post-Project Noise Levels at Single Receptor

Receptor # and Location	Activity Category and NAC	Existing Noise Level (dBA)	Predicted Noise Level with Project (dBA)	Predicted Noise Level without Project (dBA)	Predicted Noise Level with Abatement (dBA)	Reasonable and Feasible
					12-foot wall	
1—7256 Golden State Blvd	67	64.7	66.4	66.4	61.1	No/Yes

NAC: Noise Abatement Criteria

Avoidance, Minimization, and/or Noise Abatement under the National Environmental Policy Act

For purposes of National Environmental Policy Act, soundwalls must be considered because the single receptor has been identified as approaching or exceeding the noise abatement criteria by 2036.

A soundwall about 1,000 feet long and roughly 12 feet high would provide the minimum noise attenuation of 5 dBA for the affected receiver. A soundwall that provides noise attenuation of at least 5 dBA is considered feasible according to 23 CFR 772, Caltrans Protocol, August 2006. Usually noise attenuation is more effective when the receivers are within 100 feet of the proposed soundwall. The reasonable allowance for the benefited residence at this location is estimated to be $50,000. The barrier would cost about $327,000 based on a cost of $26 per square foot for a soundwall. The soundwall is feasible, however it is not reasonable. Noise abatement at this location is not recommended. Table 2.12 below shows the results of the feasibility and reasonableness soundwall analysis for the one receptor.

Table 2.12 Results of Feasibility/Reasonableness Analysis

Site # Barrier	Number of Benefited Residences	Total Reasonable Allowance	Estimated Construction Cost of Soundwall	Feasible	Reasonable
Barrier	1	$50,000	$327,000	Y	N

Construction Noise

Noise at the construction site would be intermittent, and its intensity would vary. The degree of construction noise impacts may vary for different areas of the project site and depending on the construction activities. Highway construction is accomplished in several different phases. Table 2.13 indicates these phases and their estimated overall noise levels at the right-of-way can be characterized by the following:

Table 2.13 Highway Construction Equipment Noise Levels

Construction Phase	Noise Level Range in decibels 15/30m from Source
Clearing and grubbing	86/83
Earthwork	88/85
Foundation	85/82
Base preparation	88/85
Paving	89/86

Federal Highway Administration, 1977

Existing noise levels can be compared with the expected noise levels produced by various construction activities to assess construction noise impacts. During the construction period, sensitive receptors that are close to the highway may experience temporary impacts.

The following control measures should be implemented to minimize noise and vibration disturbances at sensitive receptors during periods of construction:

- Use newer or well-maintained equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices such as mufflers and shrouding.
- Use construction methods or equipment that would provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.
- Place and relocate temporary noise barriers as needed to protect sensitive receptors against excessive noise from construction activities. Noise barriers can be made of heavy plywood or moveable insulated sound blankets.

The following administrative measures would be implemented for noise:

- Design and observe a construction noise and vibration monitoring program to limit the impacts.
- Conduct noisier operations during times of least sensitivity to receptors.
- Keep noise levels relatively uniform and avoid sudden loud or extreme noises.
- Maintain good public relations with the community to forestall objections to the unavoidable construction impacts. Provide frequent activity update of all construction activities.

A combination of abatement techniques combined with equipment noise control and administrative measures can provide the most effective means to minimize effects of construction activity impacts. Application of abatement measures would reduce the construction impacts; however, temporary increase in noise and vibration would likely occur.

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, fish passage, 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 Threatened and Endangered Species, Section 2.3.5. Wetlands and other waters are discussed in Section 2.3.2.

Affected Environment

A natural environment study was completed for the project in March 2009. The biological study area is defined as the area within a 5-mile radius of the project location. The project impact area is defined as the area that would be directly

affected, plus adjacent areas that may be indirectly affected by the project. Study methods consisted of a review of resource agency databases and inventories of special-status species, agency coordination and professional contacts, field reconnaissance, assessment of vegetation and habitat characteristics, and evaluation of impacts to identified resources. These methods were designed to meet both state and federal environmental regulations.

The study area comprises primarily agricultural lands that consist mostly of agricultural fields, but also include invasive plants on disturbed land, and riparian habitats, and aquatic resources.

Agricultural Land

Agricultural lands within the biological study area consist mostly of fallow agricultural fields, orchards, vineyards, and irrigated row crops. These areas are highly disturbed and provide minimal habitat for land-dwelling wildlife. These areas consist mostly of non-native annual grasses and other herbs.

Ruderal

Ruderal vegetation (weeds and non-native plants) occurs within the right-of-way along State Route 99. This area is highly disturbed due to agricultural activities and human disturbances such as high volume traffic and litter.

Aquatic Resources

Aquatic habitat occurs within the San Joaquin River. This river supports aquatic insects, fresh-water fishes, amphibians, fresh-water crustaceans, and aquatic plants. Historically the San Joaquin River supported migrating species of fish; however, the portion of the river within the project area is no longer connected to the Pacific Ocean and as a result no longer supports salmon or other migrating fish. In addition, bats and birds would secondarily use aquatic habitat for foraging on flying insects attracted to open water.

San Joaquin River Riparian Habitat

The San Joaquin River, 330 miles long, is the second-longest river in California. The average unimpaired runoff of the main stem of the river at Millerton Reservoir is about 1.8 million-acre feet per year. The San Joaquin River and its eight major tributaries drain about 32,000 square miles of California's San Joaquin Valley. Water from the river is used to irrigate 1,500 square miles of highly productive farmland on

the east side of the Central Valley, where 200 kinds of produce are raised from oranges to cotton (Department of Water Resources 2005). The habitat occurring within the project area is highly altered from its native state due to human activities and the introduction of non-native invasive species that have taken over portions of the San Joaquin River.

Discharges into the San Joaquin River are controlled by the Central Valley Flood Control Board (formerly known as the Reclamation Board) at Friant Dam. Approximately 95 percent of the average annual runoff of the San Joaquin River is diverted at Friant Dam for export south to Kern County and north to Madera County. Below State Route 41 down to State Route 99 much of the original riparian woodland has been removed for sand and gravel extraction, golf courses, and for agriculture (Furman 1989). As a result of these diversions and developments most of the native riparian habitat has been degraded.

Environmental Consequences

There are no natural communities of special concern identified by the California Natural Diversity Database within the biological study area for this project.

There is no designated critical habitat within the biological study area for the Island Park Six-Lane project.

San Joaquin River Riparian Habitat

The portion of the San Joaquin River located within the area of the project is highly degraded. Historically this river site was the location of an asphalt plant. Much of the native habitat has been degraded by human activities and lack of natural flow levels.

Tree removal would be required within 30 feet on either side of the existing San Joaquin River Bridge potentially along the edge of the southernmost biofiltration swale. Native riparian trees that would be removed include cottonwood, Gooding's black willow, box elder, Western sycamore, and Oregon ash.

Avoidance, Minimization, and/or Mitigation Measures

To the maximum extent feasible, native riparian trees would be avoided and protection measures would be implemented to protect avoided riparian trees from project related activities.

Before construction, Caltrans would establish environmentally sensitive areas, protecting each riparian tree that would be avoided by the project with orange mesh fencing. The environmentally sensitive areas would establish a dripline protection area for each tree, determined by a radius measurement from the trunk of the tree to the tip of its longest limb, where feasible. In addition, the limits of the construction area would be flagged, and all activity would be confined within the marked area.

Compensatory mitigation would be required by the California Department of Fish and Game to receive a Streambed Alteration Agreement for work in and around the streambed of the San Joaquin River Bridge. The required compensatory mitigation would include replanting native riparian trees in-kind at a 3:1 ratio for trees between 4 to 25 inches diameter at breast height. Trees over 25 inches diameter at breast height are defined as 'heritage' trees and require replanting at the higher ratio of 10:1.

An evaluation would be conducted prior to submission of the Streambed Alteration Agreement permit application to determine the number of native riparian trees planned for removal. Caltrans would then develop an on-site revegetation plan to mitigate for project impacts.

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 Clean Water Act (33 United States Code 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States 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 Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can 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 with oversight by the Environmental Protection Agency.

The Executive Order for the Protection of Wetlands (Executive Order 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, 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 and the Regional Water Quality Control Boards. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that would substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Game before beginning construction. If the California Department of Fish and Game determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. The California Department of Fish and Game's 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 Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the Department of Fish and Game.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The Regional Water Quality Control Boards also issue water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

Affected Environment

The San Joaquin River has been identified as a jurisdictional water of the United States because it is considered a navigable waterway. This river provides aquatic habitat for local wildlife species. No jurisdictional wetlands were identified within the project area.

Surveys were conducted to determine the presence of Army Corps of Engineers jurisdictional waters as pertaining to Section 404 of the Clean Water Act. No potential wetlands were identified, but the ordinary high water mark of the San Joaquin River, as a jurisdictional water of the United States, was delineated and mapped on March 28, 2008 according to the guidelines presented in the Army Corps of Engineers Wetlands Delineation Manual.

Environmental Consequences

It is anticipated that the project would result in impacts to waters of the United States. At this point in the project's development the exact acreage of impacts are not known. It is estimated that 0.05 acres at maximum would be impacted.

Avoidance, Minimization, and/or Mitigation Measures

Before construction, Caltrans would establish an environmentally sensitive area marked by orange mesh fencing, to reduce construction-related impacts to waters.

Jurisdictional waters of the United States would be affected by the project activities, requiring Section 404 Nationwide Permits (NWP) #14 and #33 from Army Corps of Engineers as well as a Section 401 certification from Regional Water Quality Control Board. In addition, a 1602 Streambed Alteration Agreement from the California Department of Fish and Game would be required for work within or adjacent to the San Joaquin River.

The California Department of Fish and Game would require avoidance measures for migratory birds, and bats species as well as mitigation for impacts to riparian habitat affected by project activities. Mitigation may be in the form of a revegetation plan that would involve replanting native species within the project area. The California Department of Fish and Game may also include avoidance measures in the Streambed Alteration Agreement for migratory birds and bat species.

Terms, conditions, and provisions provided within Streambed Alteration Agreements, Clean Water Act Section 404 permits, and Clean Water Act Section 401 permits are designed to minimize and avoid impacts to the waterway. Caltrans would receive these permits and would include these permits in the solicitation for contractor bid information. In addition, the project would incorporate standard Caltrans best management practices to prevent impacts related to degradation of water quality.

To ensure no net loss of waters of the United States, one or more of the following options would compensate for the permanent loss of waters:

- Payment of the appropriate mitigation fee
- Dedication of mitigation lands
- Purchase of approved mitigation bank credits
- Development of an alternative mitigation plan

2.3.3 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanographic and Atmospheric Administration Fisheries Service, and the California Department of Fish and Game are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife 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 Section 2.3.5 below. All other special-status animal species are discussed here, including California Department of Fish and Game fully protected species and species of special concern, and U.S. Fish and Wildlife Service or the National Oceanographic and Atmospheric Administration 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
- Sections 4150 and 4152 of the Fish and Game Code

Affected Environment

Migratory Birds

According to the natural environment study completed in March 2009, bird species protected by the Migratory Bird Treaty Act of 1918 and California Department of Fish and Game Code Section 3511 use the study area for roosting, nesting, and foraging year-round. Birds covered by the Migratory Bird Treaty Act are protected from hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any bird, or any part, nest or egg. State fully protected species (including their parts) may not be taken or possessed at any time. Birds within California have an approximate breeding and nesting season from February 15 to September 1.

Bats (Special Concern/Sensitive Animal Species)

California has 24 indigenous bat species throughout the state. At least 17 of these bat species are known to use man-made structures, including buildings and bridges. Fifteen California bat species are ranked as having a rare status with state or federal agencies; ten are California species of special concern as listed by California Department of Fish and Game and five are considered sensitive by the Bureau of Land Management or the U.S. Forest Service.

All California bats interact with the transportation system, sometimes positively, for example finding roosting opportunities on transportation infrastructure, and sometimes negatively, such as being physically injured by moving vehicles. All bat roosts are considered a sensitive resource by the California Department of Fish and Game requiring avoidance, minimization, and/or replacement of habitat to be addressed.

Below is a brief description of the sensitive/rare bat species that could occur within the biological study area:

Pallid bat

The Pallid bat (*Antrozous pallidus*) is a California Department of Fish and Game species of special concern year round resident of California and is most often found in low- to middle-elevation areas. This species selects a variety of day roosts including rock outcrops, mines, caves, tree hollows, buildings, and bridges. The pallid bat is known to frequently roost on bridge structures.

Townsend's big-eared bat

The Townsend's big-eared bat (*Corynorhinus townsendii*) is a California Department of Fish and Game species of special concern that is associated with caves and mines but sometimes roosts on bridge structures. This species is found throughout California, from low desert habitats to mid-elevation mountain habitats in the summer. The Townsend's big-eared bat hibernates at high elevations in the White and Inyo mountains.

Spotted bat

The spotted bat (*Euderma maculatum*) is a California Department of Fish and Game species of special concern that has a patchy distribution limited by availability of cliff roosting habitats. This species is found in a wide variety of habitats, from low desert to high elevation coniferous forests. The spotted bat is closely associated with rocky cliffs and is not known to use bridge structures.

Hoary bat

The Hoary bat (*Lasiurus cinereus*) is primarily found in forested habitats throughout California and is considered a medium-priority species by the Western Bat Working Group. This species day roosts within the foliage of coniferous and deciduous trees. The hoary bat is not known to use bridges as it frequently uses trees for roosting.

Western small-footed myotis

The Western small-footed myotis (*Myotis ciliolabrum*) distribution in California is poorly understood and is considered a medium-priority species by the Western Bat Working Group. It inhabits a variety of habitats including desert scrub, grasslands, oak and pinyon juniper woodlands into pine forests. Roosts have been found in cavities of mines and trees; they also sometimes use bridge structures.

Fringed myotis

The fringed myotis (*Myotis thysanodes*) is a California Department of Fish and Game species of special concern that is found from coastal regions to at least 6,400 feet elevation within the Sierra Nevada. In California this species has been found in mixed deciduous, coniferous forests, and Joshua tree woodland. Day and night roosts include mines, caves, trees, and buildings; sometimes bridge structures are used.

Yuma myotis

TheYuma myotis (*Myotis yumanensis*) is a California Department of Fish and Game species of special concern that is found throughout California. This species is associated with low elevation reservoirs where it roosts commonly in buildings.

Yuma myotis also frequently use bridge structures for day and night roosting (Erickson 2002).

Western mastiff bat

The Western mastiff bat (*Eumops perotis*) is a California Department of Fish and Game species of special concern that is found primarily in southern and central California. This species distribution is tied to availability of suitable roosting habitat. The species establishes day roosts primarily in cliff crevices, and cracks in boulders, or occasionally on buildings. Roosts typically are 6 meters or more above the ground.

Environmental Consequences

Migratory Birds

Foraging and nesting habitat for various migratory birds is present throughout the proposed project's biological study area. Migratory birds not already discussed that could nest within this biological study area include the mourning dove (*Zenaida macroura)*, house finch (*Carpodacus mexicanus*), and northern mockingbird (*Mimus Polyglottos*). Migratory birds not already discussed that could use habitat within the biological study area for roosting and foraging include the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), black phoebe (*Sayornis nigricans)*, Brewer's blackbird *(Euphagus cyanocephalus)*, and Western meadowlark (*Sturnella neglecta*).

Bats

Due to the structure of the existing bridge and safety issues regarding nighttime surveys, protocol bat surveys were not conducted. Caltrans would consult with California Department of Fish and Game to determine the potential bat colony size, species, and location occurring at the San Joaquin River Bridge.

Implementation of minimization measures discussed below are necessary to reduce impacts to potential bat species that could be using the bridge and would take place in the spring prior to construction. Therefore, no impacts to bat species listed as California Species of Concern would be anticipated.

Avoidance, Minimization, and/or Mitigation Measures

Migratory Birds

Due to the project's use of avoidance and minimization efforts, no compensatory mitigation is proposed for potential impacts to migratory birds.

Trees, shrubs and other vegetation shall be removed prior to the nesting season of migratory birds. If removal of nests is deemed necessary, the removal would occur during the time of year when the nests are not used (approximately September 2 to February 14).

A preconstruction survey for migratory birds within the biological study area and adjacent habitat would be conducted 14 to 30 days before the project starts. If an active nest were to be detected, the California Department of Fish and Game would be consulted. An environmentally sensitive area marked by orange mesh fencing may be established around the nest site to prevent nesting disturbance. Work may be temporarily suspended if nesting activity cannot be prevented. Standard specifications would be included in the construction bid package to avoid impacts to migratory birds.

Bats

Construction activities that would disturb a maternity roost or seasonal roost for bats, whether or not the bats are special-status species, are prohibited by Caltrans. The agency's goal is to maintain and operate structures for the purposes of transportation without adversely affecting bat populations, while also balancing the needs of bats with the safety of transportation workers.

Exclusion measures prior to demolition of each side of the bridge would prevent bat species from roosting within the expansion gaps of the San Joaquin River Bridge. Measures may include installation of exclusionary features while the bats are away from the roost prior to April 15 of the construction year, so that no exclusions would take place during the maternity season.

California Department of Fish and Game includes conditions to reduce impacts to wildlife associated with Streambed Alteration Agreements, §Section 1600 of the Fish and Game Code, including bats and birds. California Department of Fish and Game is also required to comply with California Environmental Quality Act when issuing §1600 Streambed Alteration Agreements, which may require that the applicant mitigate for impacts to bats and bat habitat.

The new bridge design would replace removed bat habitat to provide for the same size population or more. Bat habitat may be in the form of bat boxes embedded within the structure or attached externally.

2.3.4 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: United States Code, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service and the National Oceanographic and Atmospheric 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 the Federal Endangered Species Act 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, California Fish and Game Code, Section 2050, et seq. The California Endangered Species Act 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 is the agency responsible for implementing the California Endangered Species Act. 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." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by the California Department of Fish and Game. For projects requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Game may also authorize impacts to the California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

The natural environment study completed in March 2009 identified the presence or possibility of presence for the following species:

Swainson's Hawk

The Swainson's hawk is listed by the State of California as threatened, and is protected by the Migratory Bird Treaty Act of 1918. The Migratory Bird Treaty Act decrees that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. The Migratory Bird Treaty Act is the domestic law that affirms, or implements, the United States commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource.

The Swainson's hawk is a summer migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County and Mojave Desert. It winters in South America. The hawk breeds in sparsely covered juniper-sage flats, riparian areas, and in oak savannah in the Central Valley and it forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Formerly abundant in California, the population has declined from the loss of nesting habitat.

Breeding occurs from late March to late August, with peak activity occurring in late May through July. Nests are composed of a platform of sticks, bark, and fresh leaves built in a tree or bush, or on a utility pole from 1.3-30 meters (4-100 feet) above ground. Nests occur in open riparian habitat, in scattered trees, or in small groves in sparsely vegetated flatlands. Nests are usually found near water in the Central Valley, but they can also be found in arid regions. Clutch size is 2-4 eggs, with an incubation period of 25-28 days.

The Swainson's hawk was historically regarded as one of the most numerous raptors in the state. The dramatic decline in the population of the Swainson's hawk has been attributed to the loss of native nesting and foraging habitat, and more recently to the loss of suitable nesting trees. This loss of nesting habitat within riparian areas has been accelerated by flood control practices and bank stabilization programs.

Valley Elderberry Longhorn Beetle

The Valley Elderberry Longhorn Beetle is listed as a Federally Threatened Species and is protected by the Federally Endangered Species Act. The Valley Elderberry Longhorn Beetle's current distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield. It is completely dependent

on its host plant, the blue elderberry (*Sambucus mexicana*) a common component of riparian forests of the Central Valley and associated foothills.

The adults emerge from pupation inside the wood of elderberry shrubs in the spring as their flowers begin to open. The exit holes made by the emerging adults are distinctive small oval openings. Often these holes are the only clue that the beetles occur in an area. The adults eat the elderberry foliage until about June when they mate. The females lay eggs in crevices in the bark. Upon hatching the larvae then begin to tunnel into the tree where they will spend 1-2 years eating the interior wood, which is their sole food source.

Environmental Consequences

Swainson's Hawk

Protocol surveys were not conducted, though, it is likely that this species may occur within the project area since the project is within the known range of the species and suitable nest trees are present. However, there were no observations of Swainson's hawk in the project area during all other surveys.

No direct impacts to Swainson's hawk are anticipated to occur as a result of the project. However, prior to construction there is potential that a Swainson's hawk could build a nest adjacent to the project area. If an active nest is detected California Department of Fish and Game would be consulted and an environmentally sensitive area may be established around the nest site to prevent nesting disturbance. Work may be temporarily suspended if nesting birds are found.

Valley Elderberry Longhorn Beetle

Ten elderberry shrubs (identified as EB1 through EB10), with one or more stems measuring 1 in or greater in diameter at ground level, were identified within or adjacent to the project area. A map depicting the location of each shrub within the biological study area can be found in Appendix E.

Of the ten shrubs within the project impact area, eight would be avoided due to the biofiltration swale design (EB-2, EB-3, EB-4, EB-5, EB-6, EB-7, EB-8, and EB-10). Two elderberry shrubs would be affected and removed due to construction of the project (EB-1 and EB-9). No indirect impacts are anticipated to occur to the Valley Elderberry Longhorn Beetle as a result of the project.

Avoidance, Minimization, and/or Mitigation Measures

Swainson's Hawk

Preconstruction surveys for Swainson's hawk would be conducted 14 to 30 days before the projects starts. If an active Swainson's hawk nest is detected, minimization efforts would be coordinated with the California Department of Fish and Game and may include a no-work buffer zone around an active nest and/or a qualified biologist would monitor an active nest during construction activities to ensure that no interference with the hawk's breeding activities would occur.

Due to the implementation of avoidance and minimization efforts, no compensatory mitigation is proposed for potential impacts to Swainson's hawk.

Valley Elderberry Longhorn Beetle

Of the 10 shrubs within the biological study area none contained exit holes. Eight of the 10 shrubs (EB-2, EB-3, EB-4, EB-5, EB-6, EB-7, EB-8, and EB-10) would be avoided by the project. The eight elderberry shrubs that would be avoided would be designated as an environmentally sensitive area and avoided by a minimum of 20 feet from the edge of shrub canopy drip-line. Prior to construction, orange mesh fencing would be installed within the Caltrans right-of-way to avoid accidental and indirect construction-related impacts to the elderberry shrubs. A worker training program would be held to instruct workers on the status of the beetle, how to avoid damaging elderberry shrubs, and the possible penalties for not complying with the requirements.

The project meets the criteria for programmatic consultation with U.S. Fish and Wildlife Service regarding actions that the Federal Highway Administration may take on projects with limited effect on the Valley Elderberry Longhorn Beetle. Mitigation would involve transplanting EB-1 and EB-9, as well as establishment of elderberry seedlings and associated native plants at an appropriate mitigation site to be preserved in perpetuity according to the *Conservation Guidelines for Valley Elderberry Longhorn Beetle*.

According to the current project schedule, construction would not occur for approximately three years (October of 2012). Based on the condition and location of the elderberry shrubs that would potentially be affected, additional stem growth is anticipated. To avoid likely re-initiation of formal consultation, the authority for an additional 6 stems (4 stems measuring 1-3 inches, and 2 stems at 3-5 inches in diameter) would be requested for mitigation calculations. The mitigation would therefore involve transplanting EB-1 and EB-9 as well as establishment of 19

elderberry seedlings and 19 associated native plants at an appropriate mitigation site to be preserved in perpetuity according to the *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS 1999).

Within one year of construction, Caltrans would perform an elderberry shrub survey to verify actual stems to be removed by the project. If the stem count were less than the authorized take specified in the Biological Opinion, Caltrans would notify the U.S. Fish and Wildlife Services of the actual number of stems affected and proceed with the mitigation measure for the reduced stem number per guidelines in the Biological Opinion. If take exceeds the amount specified in the Biological Opinion, Caltrans would request Federal Highway Administration re-initiate formal consultation with the U.S. Fish and Wildlife Services to amend the Biological Opinion.

2.3.5 Invasive Species

Regulatory Setting

On February 3, 1999, President Bill Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

Affected Environment

Many non-native species were identified within the biological study area during surveys; seven of these plant species and bullfrog are considered invasive. The official definition provided by Executive Order 13112 (signed by President Bill Clinton, 1999) states, "invasive species means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health."

The biological study area was evaluated for presence of invasive plant species based on the California Department of Food and Agriculture (CDFA) Noxious Weed List (NWL) and the Federal Weed List.

The following invasive plant species identified on the Noxious Weeds List occurring within the existing right-of-way include:

- Yellow star thistle (*Centaurea solstitialis*),
- Bull thistle (*Cirsium vulgare*),
- Russian thistle (*Salsola tragus*),
- Sunflower (*Helianthus annuus*),
- Yellow foxtail (*Setaria lutescens*),
- Bermuda grass *(Cynodon dactylon)*
- Yellow nutsedge *(Cyperus esculentus)*

The project site does not contain any plant species listed on the United States Department of Agriculture's Federal Weed List (updated June 2006).

The United States Department of Agriculture considers bullfrogs an invasive species that competes with and preys on native species. Bullfrog larvae were observed in the biological study area on several occasions during surveys.

This project would not include transportation of invasive animals and would not change the surrounding habitat to encourage immigration of invasive animals to the site. The proposed project has an unlikely chance to facilitate the spread of invasive species with implementation of preventative measures to be included in the special provisions of project bid package.

Avoidance, Minimization, and/or Mitigation Measures

Measures included in the special provision may include but are not limited to:

- Properly cleaning and maintaining all equipment and vehicles before bringing them on-site to avoid transporting dirt and seed material to the project site
- Using erosion control measures free of noxious weed materials
- Using fill material free of noxious weed materials
- In the event of a need for off-site disposal of excess fill at the end of construction, using measures to prevent the spread of noxious weeds
- Properly cleaning all equipment and vehicles when leaving the project site to avoid transporting dirt and seed material that might spread noxious weeds to other sites

In compliance with the Executive Order on Invasive Species, Executive Order 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species were found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

2.4 Climate Change under the California Environmental Quality Act

Regulatory Setting

While climate change has been a concern since at least 1988 as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change, the efforts devoted to greenhouse gas emissions (GHG) reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity include carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (1,1,1,2-tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) 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; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by Environmental Protection Agency in December 2007. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow

California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this executive order is to reduce California's greenhouse gas 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, the Global Warming Solutions Act of 2006. Assembly Bill 32 sets the same overall greenhouse gas emissions reduction goals, while further mandating that the Air Resources Board 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, signed on October 17, 2006, further directs state agencies to begin implementing Assembly Bill 32, including the recommendations made by the state's Climate Action Team.

With 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 10 percent by 2020.

Climate change and greenhouse gas reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing greenhouse gas emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

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

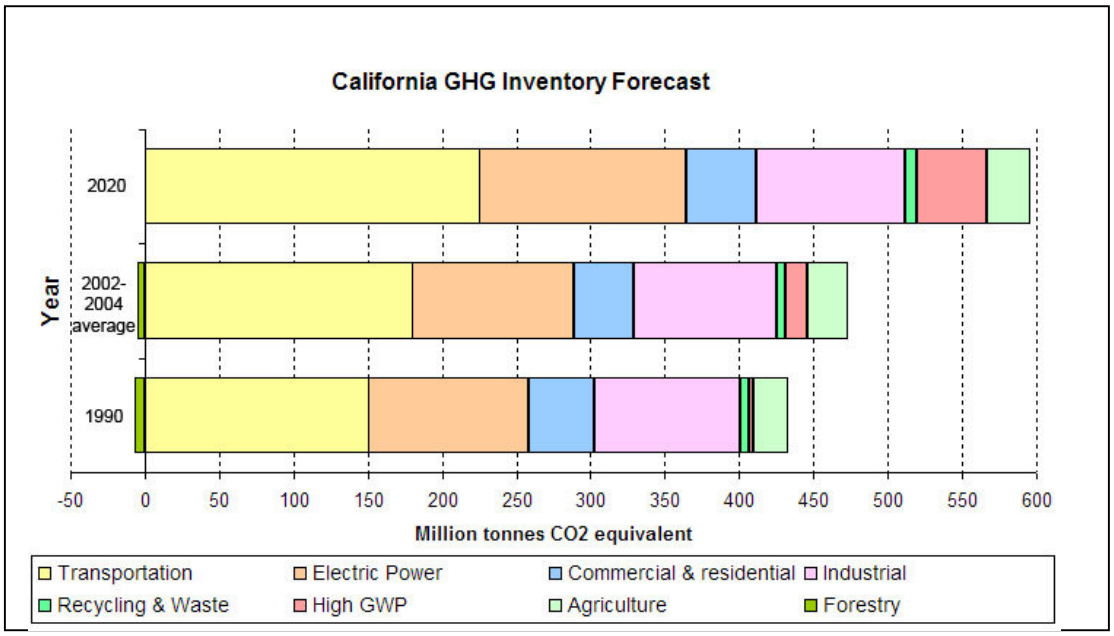
- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)--in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds 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.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

According to *Recommendations by the Association of Environmental Professionals on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (Hendrix and Wilson, March 2007), an individual project does not generate enough greenhouse gas 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. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(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.

As part of its supporting documentation for the Draft Scoping Plan, California Air Resources Board recently released an updated version of the greenhouse gas inventory for California (June 26, 2008). Figure 2-4 shows a graph from that update showing the total greenhouse gas emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.



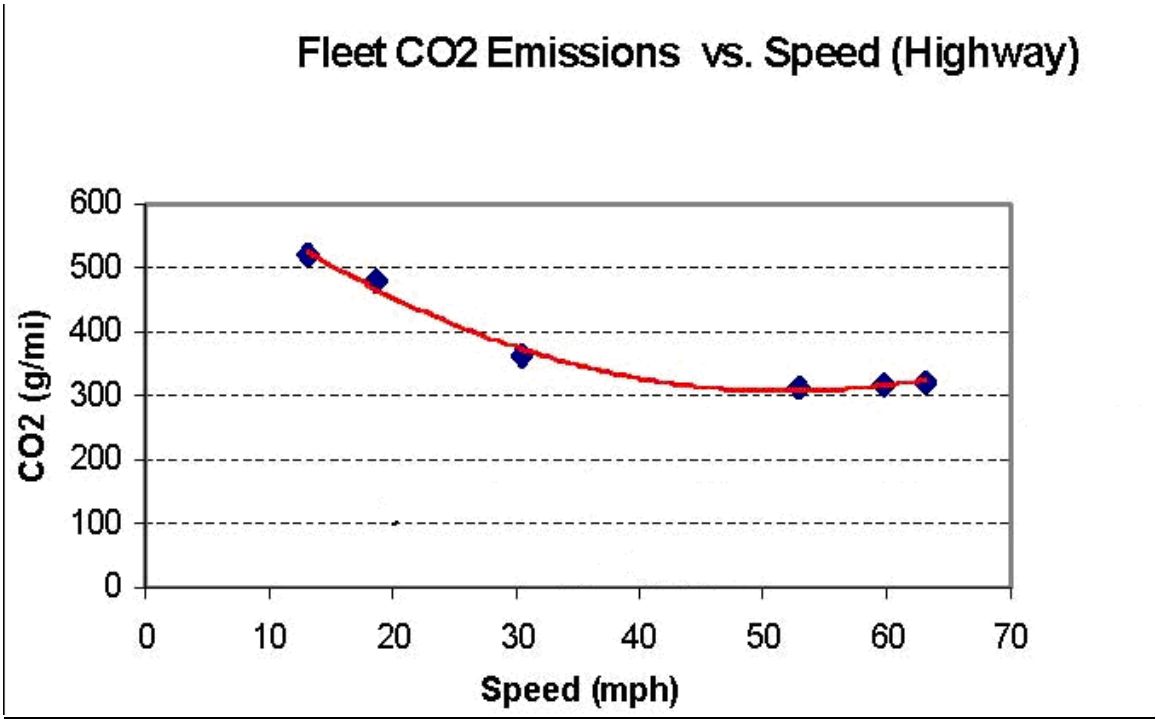
Source: http://www.arb.ca.gov/cc/inventory/data/forecast.htm

Figure 2-4 California Greenhouse Gas Inventory

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing greenhouse gas emissions reduction and climate change. Recognizing that 98 percent of California's greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human-made greenhouse gas emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006). This document can be found at: http://www.dot.ca.gov/docs/ClimateReport.pdf

Project Analysis

One of the main strategies in Caltrans' Climate Action Program to reduce greenhouse gas emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 miles per hour. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in greenhouse gas emissions.



Source: Center for Clean Air Policy— http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20(1-13-04).pdf

The Island Park Six-Lane Project is designed to improve safety, operations, as well as reduce congestion and vehicle time delay. Additionally, this project will match the existing southern segment of this route and the northern segment which is proposed for construction later this year. Currently, existing operating conditions within the project segment are characterized by LOS C and is predicted to decline to level of service "E" by the year 2016 and to "F" by the year 2026. Traffic is expected to continue at level of service F through to year 2036 without the proposed widening. With the project, the future LOS at the freeway segments and ramps improve. Please refer to the Traffic section for additional information. This project is included in the 2008 State Transportation Improvement Program, the Council of Fresno County Government's 2007 Regional Transportation Plan and in its 2009 Draft Federal Transportation Improvement Program. The project meets the functional goals explained in the *Route 99 Corridor Business Plan* (2005) and the *Route 99 Corridor Enhancement Master Plan* (2005).

Quantitative Analysis

The Build Alternative would widen the existing State Route 99 freeway from four-lanes to six lanes by adding one lane in each direction in the median, replace one bridge structure, and would require up to 10.50 acres of right-of-way.

The No-Build Alternative would not meet the project's purpose and need to reduce congestion and improve safety of this segment of State Route 99.

The quantification of carbon dioxide emissions was conducted using Caltrans' CT-EMFAC 2007 emission model for the years 2006, 2016, 2026, and 2036. The results indicate increases in traffic volume for each of the years, which correlates to higher overall carbon dioxide emissions. However, it should be noted that the project will also be increasing traffic speed, capacity, efficiency and levels of service along this segment of SR-99, and an increase in carbon dioxide emissions is directly related to the anticipated increase in traffic.

Table 2.14. Comparison of Build/No Build CO_2 Emissions

Total Emissions – US Tons per Year				
	2006	2016	2026	2036
Build	N/A	2671.17	3242.80	3787.93
No Build	2600.56	2600.56	3148.48	3669.99

The table above is somewhat misleading in that the modeling presumes that with the Build and No-Build alternatives traffic will be flowing at a speed similar to today's speeds. Carbon dioxide emissions are highest at slow speeds under 20 miles per hour. Without the project, most vehicles would be operating at speeds near 20 miles per hour at level of service "F". These vehicles would emit considerably more pollution per vehicle-mile than they would at say 40-60 miles per hour. Overall, the table indicates that an increase in GHG would occur without the project as traffic speeds continued to decline to the 20 mile per hour levels in 2036.

The improvements and lane additions to the existing roads will result in higher traffic volume. Currently, the emissions modeling software is limited to generating output only for freeway mainlines. Therefore, the above analysis does not reflect any reduction in GHG emissions that could result from reduced queue lengths at local intersections. The potential exists for further reductions in GHG emissions from vehicles spending less time idling.

Limitations and Uncertainties with Modeling

EMFAC

Although EMFAC can calculate carbon dioxide emissions from mobile sources, the model does have limitations when it comes to accurately reflecting carbon dioxide emissions. According to the National Cooperative Highway Research Program report,

Development of a Comprehensive Modal Emission Model (April 2008), studies have revealed that brief but rapid accelerations can contribute significantly to a vehicle's carbon monoxide and hydrocarbon emissions during a typical urban trip. Current emission-factor models are insensitive to the distribution of such modal events (i.e., cruise, acceleration, deceleration, and idle) in the operation of a vehicle and instead estimate emissions by average trip speed. This limitation creates an uncertainty in the model's results when compared to the estimated emissions of the various alternatives with baseline in an attempt to determine impacts. Although work by EPA and the CARB is underway on modal-emission models, neither agency has yet approved a modal emissions model that can be used to conduct this more accurate modeling. In addition, EMFAC does not include speed corrections for most vehicle classes for carbon dioxide for most vehicle classes emission factors are held constant which means that EMFAC is not sensitive to the decreased emissions associated with improved traffic flows for most vehicle classes. Therefore, unless a project involves a large number of heavy-duty vehicles, the difference in modeled carbon dioxide emissions due to speed change will be slight.

It is interesting to note that CARB is currently not using EMFAC to create its inventory of greenhouse gas emissions. It is unclear why the CARB has made this decision. Their website only states:

> REVISION: Both the EMFAC and OFFROAD Models develop carbon dioxide and methane emission estimates; however, they are not currently used as the basis for [CARB's] official [greenhouse gas] inventory, which is based on fuel usage information. However, ARB is working towards reconciling the emission estimates from the fuel usage approach and the models.

Other Variables

With the current science, project-level analysis of greenhouse gas emissions is limited. Although a greenhouse gas analysis is included for this project, there are numerous key greenhouse gas variables that are likely to change dramatically during the design life of the proposed project and would thus dramatically change the projected carbon dioxide emissions.

First, vehicle fuel economy is increasing. The Environmental Protection Agency's annual report, "Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008 (http://www.epa.gov/oms/fetrends.htm)," which provides data on the fuel economy and technology characteristics of new light-duty vehicles including cars, minivans, sport utility vehicles, and pickup trucks, confirms that average fuel

economy has improved each year beginning in 2005, and is now the highest since 1993.

Most of the increase since 2004 is due to higher fuel economy for light trucks, following a long-term trend of slightly declining overall fuel economy that peaked in 1987. These vehicles also have a slightly lower market share, peaking at 52 percent in 2004 with projections at 48 percent in 2008.

Table 2.15 Required Miles Per Gallon by Alternative

Model Year 2015 Required Miles Per Gallon (mpg) by Alternative							
No Action		25% Below Optimized	Optimized (Preferred)	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Cars	27.5	33.9	35.7	37.5	39.5	43.3	52.6
Trucks	23.5	27.5	28.6	29.8	30.9	33.1	34.7

Table 2.15 shows the alternatives for vehicle fuel economy increases currently being studied by the National Highway Traffic Safety Administration in its Draft EIS for New Corporate Average Fuel Economy (CAFE) Standards (June 2008):

Second, near-zero-carbon vehicles will come into the market during the design life of this project. According to a March 2008 report released by University of California Davis, Institute of Transportation Studies:

> "Large advancements have occurred in fuel cell vehicle and hydrogen infrastructure technology over the past 15 years. Fuel cell technology has progressed substantially resulting in power density, efficiency, range, cost, and durability all improving each year. In another sign of progress, automotive developers are now demonstrating over 100 fuel cell vehicles in California – several in the hands of the general public – with configurations designed to be attractive to buyers. Cold-weather operation and vehicle range challenges are close to being solved, although vehicle cost and durability improvements are required before a commercial vehicle can be successful without incentives. The pace of development is on track to approach pre-commercialization within the next decade.
>
> "A number of the U.S. Department of Energy 2010 milestones for fuel cell vehicles development and commercialization are expected to be met by 2010. Accounting for a five to six year production development cycle, the scenarios developed by the U.S. DOE suggest that 10,000s of vehicles per year from 2015 to 2017 would be possible in a federal demonstration

> program, assuming large cost share grants by the government and industry are available to reduce the cost of production vehicles."[1]

Third and as previously stated, California has recently adopted a low-carbon transportation fuel standard. The California Air Resources Board is scheduled to come out with draft regulations for low-carbon fuels in late 2008, with implementation of the standard to begin in 2010.

Fourth, driver behavior has been changing as the U.S. economy and oil prices have changed. In its January 2008 report, *Effects of Gasoline Prices on Driving Behavior and Vehicle Market*, http://www.cbo.gov/ftpdocs/88xx/doc8893/01-14-GasolinePrices.pdf the Congressional Budget Office found the following results based on data collected from California: 1) freeway motorists have adjusted to higher gas prices by making fewer trips and driving more slowly; 2) the market share of sports utility vehicles is declining; and 3) the average prices for larger, less-fuel-efficient models have declined over the past five years as average prices for the most-fuel- automobiles have risen, showing an increase in demand for the more fuel-efficient vehicles.

Limitations and Uncertainties with Impact Assessment

Taken from pp. 3-48 and 3-49 of the National Highway Traffic Safety Administration Draft Environmental Impact Statement for New Corporate Average Fuel Economy Standards (June 2008), Figure 2.5 illustrates how the range of uncertainties in assessing greenhouse gas impacts grows with each step of the analysis:

> "Cascade of uncertainties typical in impact assessments showing the 'uncertainty explosion' as these ranges are multiplied to encompass a comprehensive range of future consequences, including physical, economic, social, and political impacts and policy responses."

[1] Cunningham, Joshua, Sig Cronich, Michael A. Nicholas. March 2008. *Why Hydrogen and Fuel Cells are Needed to Support California Climate Policy*, UC Davis, Institute of Transportation Studies, pp. 9-10.

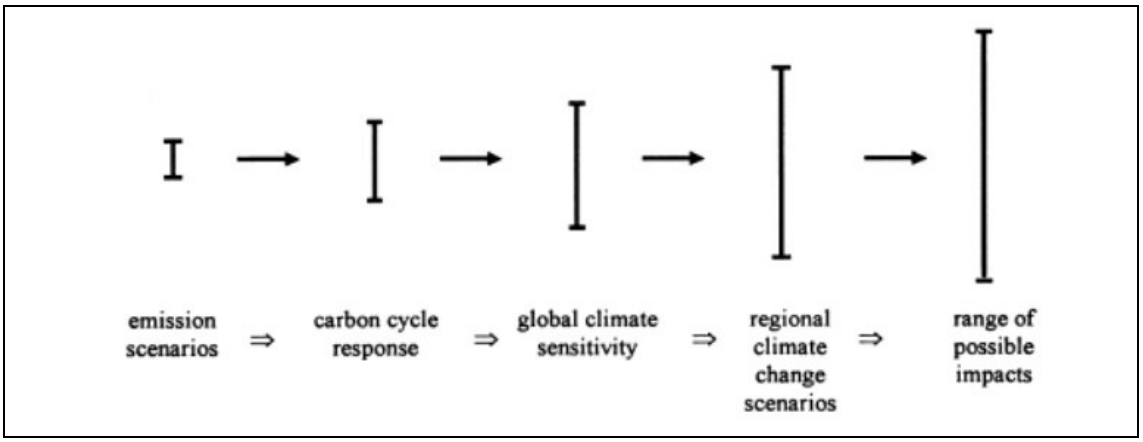


Figure 2-5 Cascade of Uncertainties

Much of the uncertainty in assessing an individual project's impact on climate change surrounds the global nature of the climate change. Even assuming that the target of meeting the 1990 levels of emissions is met, there is no regulatory framework in place that would allow for a ready assessment of what the modeled 11.4-20.9-ton increase in carbon dioxide emissions would mean for climate change given the overall California GHG emissions inventory of approximately 430 million tons of carbon dioxide equivalent. This uncertainty only increases when viewed globally.

The Intergovernmental Panel on Climate Change has created multiple scenarios to project potential future global greenhouse gas emissions as well as to evaluate potential changes in global temperature, other climate changes, and their effect on human and natural systems. These scenarios vary in terms of the type of economic development, the amount of overall growth, and the steps taken to reduce greenhouse gas emissions. Non-mitigation Intergovernmental Panel on Climate Change scenarios project an increase in global greenhouse gas emissions by 9.7 up to 36.7 billion metric tons carbon dioxide from 2000 to 2030, which represents an increase of between 25 and 90 percent.[2]

The assessment is further complicated by the fact that changes in greenhouse gas emissions can be difficult to attribute to a particular project because the projects often cause shifts in the locale for some type of greenhouse gas emissions, rather than causing "new" greenhouse gas emissions. It is difficult to assess whether some of the trip increases on Route 99 are "new" versus whether they are transferred from

[2] Intergovernmental Panel on Climate Change (IPCC). February 2007. Climate Change 2007: The Physical Science Basis: Summary for Policy Makers. http://www.ipcc.ch/SPM2feb07.pdf.

surrounding areas. Although some of the emission increases might be new, the extent to which the modeled 11.4-20.9 ton increase in carbon dioxide emissions represents a net global increase, reduction, or no change, is uncertain and there are no models approved by regulatory agencies that operate at the global or even statewide scale.

The complexities and uncertainties associated with project-level impact analysis are further borne out in the recently released draft environmental impact statement completed by the National Highway Traffic Safety Administration Corporate Average Fuel Economy standards, June 2008. As the text quoted below shows, even when dealing with greenhouse gas emission scenarios on a national scale for the entire passenger car and light truck fleet, the numerical differences among alternatives is very small and well within the error sensitivity of the model.

> "In analyzing across the Corporate Average Fuel Economy 30 alternatives, the mean change in the global mean surface temperature, as a ratio of the increase in warming between the B1 (low) to A1B (medium) scenarios, ranges from 0.5 percent to 1.1 percent. The resulting change in sea level rise (compared to the No Action Alternative) ranges, across the alternatives, from 0.04 centimeter to 0.07 centimeter. In summary, the impacts of the MY 2011-2015 Corporate Average Fuel Economy alternatives on global mean surface temperature, sea level rise, and precipitation are relatively small in the context of the expected changes associated with the emission trajectories. This is due primarily to the global and multi-sectoral nature of the climate problem. Emissions of CO_2, the primary gas driving the climate effects, from the United States automobile and light truck fleet represented about 2.5 percent of total global emissions of all greenhouse gases in the year 2000 (EPA, 2008; CAIT, 2008). While a significant source, this is a still small percentage of global emissions, and the relative contribution of CO_2 emissions from the United States light vehicle fleet is expected to decline in the future, due primarily to rapid growth of emissions from developing economies (which are due in part to growth in global transportation sector emissions)." [NHTSA Draft Environmental Impact Statement for New Corporate Average Fuel Economy Standards, June 2008, pp.3-77 to 3-78]

Construction Emissions

GHG 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 would 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.

California Environmental Quality Act Conclusion

Based on the above, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and the California Environmental Quality Act significance, it is too speculative to make a determination regarding the project's direct impact and its contribution on the cumulative scale to climate change. However, as previously stated, Caltrans does anticipate a reduction in greenhouse gas emissions with the project. Nonetheless, Caltrans is taking further measures to help reduce energy consumption and greenhouse gas emissions. These measures are outlined in the following section.

Assembly Bill 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as the California Air Resources Board works to implement Assembly Bill 1493 and help achieve the targets set forth in Assembly Bill 32. Many of the strategies Caltrans is using to help meet the targets in Assembly Bill 32 come from the California Strategic Growth Plan, which is updated each year. 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 $107 billion in transportation funding during the next decade.

As shown in Figure 2.6, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in greenhouse gas 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 yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

As part of the *Climate Action Program at Caltrans* (December 2006, http://www.dot.ca.gov/docs/ClimateReport.pdf), Caltrans is supporting efforts to

reduce vehicle miles traveled by planning and implementing smart land use strategies: encouraging job/housing proximity, developing transit-oriented communities, and providing 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 ongoing research efforts at universities, by supporting legislation 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 the U.S. Environmental Protection Agency and the California Air Resource Board.

Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the University of California at Davis.

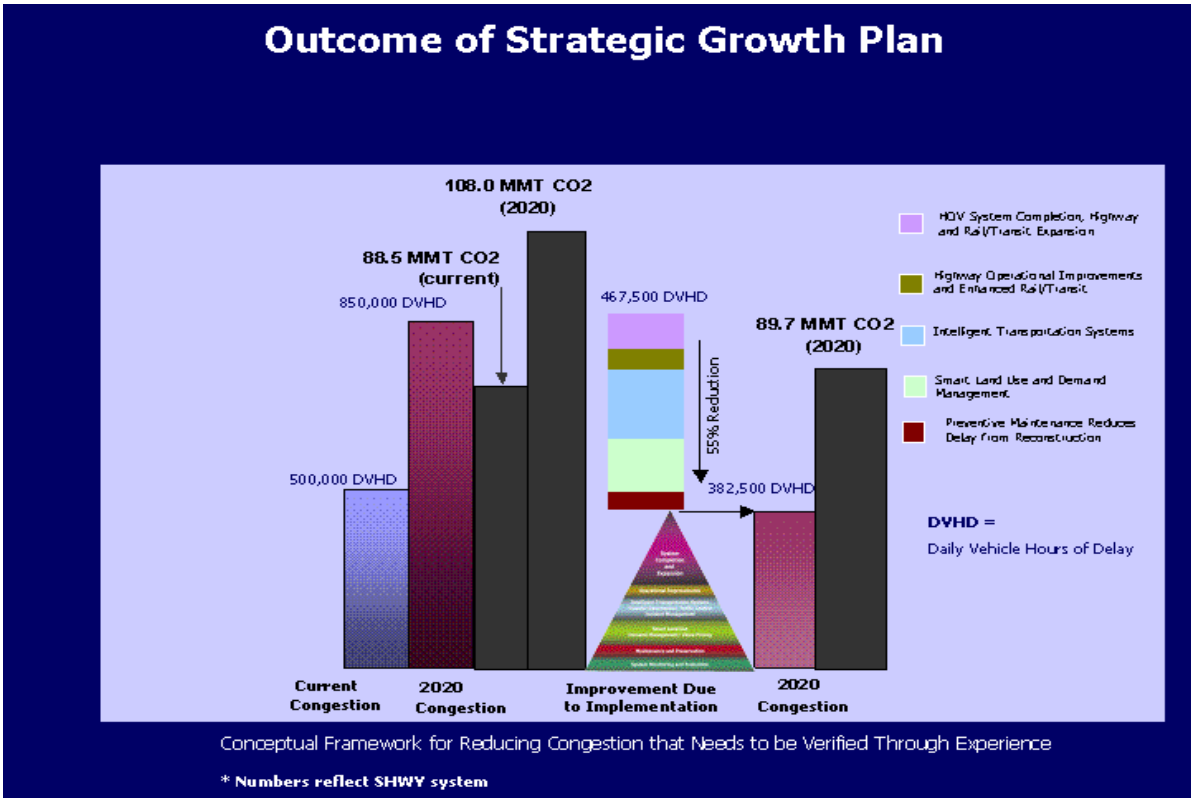


Figure 2-6 Outcome of Strategic Growth Plan

Table 2.16 summarizes the department and statewide efforts that Caltrans is implementing to reduce greenhouse gas emissions. For more detailed information about each strategy, please see *Climate Action Program at Caltrans* (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf.

Table 2.16 Climate Change 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	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & Greenhouse Gas 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	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.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	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	18.67

To the extent that it is applicable or feasible for the project and through coordination with the project development team, the following measures would also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- Riparian planting would be included to maintain shade along creek corridors. In the short term, immature tree planting would probably not offset greenhouse gas produced as a result of project construction, however in the long-term tree planting should enhance the carbon sequestration potential of the project site and greenhouse gas emission levels would in theory continue to improve over time as the trees became more mature, except as counteracted by increased traffic volumes.

- Idling restriction—According to Caltrans Standard Specification Provisions, idling time for lane closure during construction is restricted to ten minutes in each direction; in addition, the contractor must comply with the San Joaquin Valley Air Basin's rules, ordinances, and regulations regarding air quality restrictions.

- Recycling—Where feasible, existing material would be salvaged and incorporated into the final design. Candidates for recycling include existing metal beam barriers and the structural section of the existing shoulders.

- Rubberized asphalt concrete—Rubberized asphalt concrete would be used as road material. This material is made with recycled tires and has been in use since the late 1970s as a cost-efficient and environmentally friendly alternative to traditional road paving.

- Landscaping—All removed trees and vegetation would be replaced in accordance with established Caltrans policy for replacement planting. Landscaping reduces surface warming and, through photosynthesis, decreases carbon dioxide. Vegetation would help offset any potential carbon dioxide emissions increase.

The following waste reduction and energy conservation practices and materials would be used in the project as part of highway replacement planting and erosion control work:

- Compost that Caltrans specifies comes from green material consisting of chipped, shredded, or ground vegetation; or clean processed recycled wood products, including biosolids. Specified compost does not contain paint, petroleum products, pesticides or any other chemical residues harmful to animal life or plant growth.

- Fiber rolls from recycled products are used for erosion control. Fiber weed control mats are used under guardrails to reduce maintenance and use of herbicides to control weeds.

- Wood mulch that Caltrans specifies comes from green material consisting of chipped, shredded, or ground vegetation; or clean, processed, recycled wood products. If a coloring agent is used on the mulch, it must be biodegradable and nontoxic, and free from copper, mercury, and arsenic.

- Caltrans specifies native or drought tolerant plants, and uses drought-tolerant and native seeds. Where feasible, slow-growing plants that require less maintenance and water, and less pesticide and herbicide use are used.

- Irrigation valve actuators are low voltage (24 volts). After the plant establishment period, irrigation schedules are reduced to the least amount of water possible to reduce weeds and erosion.

- Careful attention to design minimizes vegetation maintenance expenditures including water, pesticide and herbicide usage.

- Biological control can also be an effective alternative to chemical controls. Fiber weed control mats are used under guardrails to reduce maintenance and use of herbicides to control weeds.

Caltrans continues to be actively involved on the Governor's Climate Action Team as the Air Resources Board works to implement Assembly Bills 1493 and 32. As part of the Climate Action Program at Caltrans (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, 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 and light and heavy-duty trucks. However, it

is important to note that control of fuel economy standards is held by the United States Environmental Protection Agency and the Air Resources Board. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California at Davis.

Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Climate change adoption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, Governor Schwarzenegger signed Executive Order S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change.

The California Resources Agency (now the Natural Resources Agency Resources Agency), through the interagency Climate Action Team, was directed to coordinate with local, regional, state and federal public and private entities to develop a state Climate Adaptation Strategy. The Climate Adaptation Strategy will summarize the best known science on climate change impacts to California, assess California's vulnerability to the identified impacts and then outline solutions that can be implemented within and across state agencies to promote resiliency.

As part of its development of the Climate Adaptation Strategy, Resources Agency was directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010 to advise how California should plan for future sea level rise. The report is to include: relative sea level rise projections for California, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates; the range of uncertainty in selected sea level rise projections; a synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems; a discussion of future research needs regarding sea level rise for California.

Furthermore Executive Order S-13-08 directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level affecting safety, maintenance and operational improvements of the system and economy of the state. The Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Prior to the release of the final Sea Level Rise Assessment Report, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. However, all projects that have filed a Notice of Preparation, and/or are programmed for construction funding the next five years (through 2013), or are routine maintenance projects as of the date of Executive Order S-13-08 may, but are not required to, consider these planning guidelines. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data. (Executive Order S-13-08 allows some exceptions to this planning requirement.). This project is not mandated to consider sea level rise because of its geographical location.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted as part of Governor's Schwarzenegger's

Executive Order on Sea Level Rise and is mobilizing to be able to respond to the National Academy of Science report on Sea Level Rise Assessment which is due to be released by December 2010.

On August 3, 2009, Natural Resources Agency in cooperation and partnership with multiple state agencies, released the 2009 California Climate Adaptation Strategy Discussion Draft, which summarizes the best known science on climate change impacts in seven specific sectors and provides recommendations on how to manage against those threats. The release of the draft document set in motion a 45-day public comment period. Led by the California Natural Resources Agency, numerous other state agencies were involved in the creation of discussion draft, including Environmental Protection; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The discussion draft focuses on sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. The strategy is in direct response to Gov. Schwarzenegger's November 2008 Executive Order S-13-08 that specifically asked the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings. A revised version of the report was posted on the Natural Resource Agency website on December 2, 2009; it can be viewed at: http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change impacts, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, and interagency coordination meetings. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Cultural Consultation

July 5, 2007: Caltrans sent a letter to the Native American Heritage Commission requesting a review of Native American cultural resources and sacred sites within or adjacent to the project area limits and for a list of Native American individuals or organizations with knowledge of these resources and sites.

July 27, 2007: Initial tribal consultation letters were sent to the following Native American representatives:

- Connie Lewis, Chairperson, Big Sandy Rancheria of Mono Indians
- Ron Goode, Chairperson, North Fork Mono Tribe
- Clarence Atwell, Chairperson, Santa Rosa Rancheria-Tachi Tribe
- Lee Ann Walker-Grant, Chairperson, Table Mountain Rancheria
- Keith F. Turner, Dumna Wo-Wah Tribal Government
- Karin Wilson Kirkendal, Chairperson, Dumna Tribal Government
- Jim Redmoon, Cultural Resources Representative, Dumna Tribal Government
- Kenneth Woodrow
- Lawrence Bill, Interim Chairperson of Sierra Nevada Native American Coalition
- Lorrie Planas, Choinumni Tribe
- Carol Bill, Tribal Administrator, Cold Springs Rancheria of Mono Indians

Bob Pennell of the Table Mountain Rancheria asked to be kept informed of any discoveries within the project area of potential effect. Jim Redmoon requested monitoring during a conversation with Mandy Marine, District 6 Native American Coordinator (DNAC), as the area surrounding the San Joaquin River is considered

culturally sensitive. No other concerns or issues were raised regarding any sensitive resources within the study area by any of the above listed individuals or the Native American Heritage Commission.

May 28, 2008: The Santa Rosa Rancheria initially requested that a Native American Monitor be included in the testing proposal due to previous discoveries of human remains and other cultural materials within the project limits. No monitors were available for the dates specified for testing. Jim Redmoon confirmed reports of recent discoveries within the project limits and provided a cultural sensitivity map for future reference.

Biological Resource Consultation

June 27, 2007: Caltrans received official online species lists from U.S. Fish and Wildlife Service (USFWS).

October 16, 2007: Caltrans biologist met with Gerald Hatler and Laura Peterson-Diaz of California Department of Fish and Game to discuss the potential impacts the project may have on the San Joaquin River Restoration Project. California Department of Fish and Game stated that project construction would most likely occur before any salmon species are introduced into the San Joaquin River, and that the introduced individuals would not be protected under the Endangered Species Act since they will be considered an experimental population. California Department of Fish and Game stated that Caltrans should take measures to control the spreading of the invasive scarlet wisteria (*Sesbania punicea*) that occurs within the project limits and that Caltrans should consider using specific-sized fill gravel within the river to support future salmon populations.

November 8, 2007: Caltrans sent a letter to Susan Jones of the U.S. Fish and Wildlife Service requesting guidance regarding habitat suitability for the San Joaquin kit fox in the project area.

November 26, 2007: Caltrans received an email from Rocky Montgomery of the U.S. Fish and Wildlife Service, asking for a site visit of the project area.

December 4, 2007: A site visit of the project area was conducted by Caltrans biologist Sarah Paulson and Rocky Montgomery of the U.S. Fish and Wildlife Service to review the habitat suitability for the San Joaquin kit fox. Mr. Montgomery stated that the U.S. Fish and Wildlife Service considered the project area to be an area of low habitat suitability for the San Joaquin kit fox based on recent research. It was agreed,

by both parties, that due to the heavily disturbed nature of the project area and surrounding habitats, the lack of recent sightings, and the absence of dispersal corridors in the area, the proposed project would not pose an impact to the San Joaquin kit fox.

December 18, 2007: Caltrans Biology Branch Chief Zachary Parker met with Doug Hampton of the National Marine Fishery Service regarding the proposed project and potential impacts to the San Joaquin River Restoration Project. Mr. Hampton stated that currently the portion of the San Joaquin River that would be affected by the proposed project does not support listed fish species. Mr. Hampton also stated that in the event that migrating fish such as salmon are re-introduced into that portion of the San Joaquin River, the fish would be considered an experimental species and not subject to the same protections as listed species. Mr. Hampton also expressed that they did not believe that introduction of fish would occur prior to completion of construction of the proposed project.

December 4, 2008: Caltrans contacted Laura Peterson Diaz regarding California Department of Fish and Game's concerns about San Joaquin kit fox in the project area. Ms. Diaz responded that California Department of Fish and Game does not believe that the proposed project would affect the San Joaquin kit fox.

October 5, 2009: Caltrans sent a letter to Susan Jones of the U.S. Fish and Wildlife Service requesting to append the proposed project to the March 11, 1997 *Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office, California.*

October 21, 2009-January 7, 2010: Ongoing coordination with Caltrans and Jen Schofield (USFWS) regarding the project description as well as questions concerning the proposed compensation for impacts to Valley Elderberry Beetle and the proposed location of compensation for impacts to Valley Elderberry Beetle.

Janurary 14, 2010: Continued discussions with Jen Schofield (USFWS) concerning bridge work, water quality control measures, project acreage, the distance of linear foot of undeveloped riparian habitat present, and compensation associated with impacts to Valley Elderberry Beetle.

Janurary 20, 2010: Caltrans met with Laura Peterson-Diaz (CDFG) to discuss changes to design elements involving the deletion of drainage basins and addition of bioswales.

February 4, 2010: Caltrans received a Biological Opinion appending the proposed project to the March 11, 1997 *Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office, California.*

March 15, 2010: Caltrans contacted the NMFS in regards to the San Joaquin River Restoration and the Draft Fisheries Implementation Plan. Caltrans continues to coordinate with NMFS and CDFG regarding the river restoration.

Other Consultation

April 29, 2008: Caltrans Environmental contacted Michael Peterson of the Central Valley Flood Protection Board by email regarding jurisdiction over the San Joaquin River and the need to obtain an encroachment permit to complete archaeological studies. Mr. Peterson responded that for such studies, a permit was not required.

January 14, 2009: Caltrans Environmental contacted Bruce Champion of the Fresno County Natural Resource Conservation Service Center in regards to the Farmland Conversion Impact Rating.

February 6 and March 16, 2009: Caltrans Environmental contacted Garry Ford of the Madera County Natural Resource Conservation Service Center in regards to the Farmland Conversion Impact Rating.

March 3, 2009: Caltrans Environmental met with Madera County Planning to discuss all proposed/approved development in the proposed project area and surrounding area.

March 4, March 13, and March 25, 2009: Caltrans Environmental contacted Tim Johnson with Pacific Gas and Electric Company in regards to their request to relocate their facilities east of the San Joaquin River Bridge and east of the Union Pacific Railroad once construction of the new bridge is complete. This would require that Caltrans study outside of the current environmental study area and may change the current scope of the project. Ongoing discussions continue.

March 23, 2009: Caltrans Environmental contacted Bruce Barnes of the City of Fresno to request the construction schedule of the Aquarius Aquarium Institute. Caltrans was referred to the Executive Director of the Aquarius Aquarium Institute (Tom Lang). Caltrans Project Manager Jim Bane has been in contact with Mr. Lang.

April 1, 2009: Caltrans Environmental contacted the Madera County Assessors Office to confirm the absence of Williamson Act farmland contracts within the proposed project limits.

June 24, 2009: A Public Hearing was held at Rio Vista Middle School in Fresno County from 5:30p.m. to 7:30p.m. To announce the meeting, Caltrans published a public notice in local newspapers. A Notice of Availability for the draft environmental document along with a copy of the public notice was also mailed to 13 residences and business owners within the project limits and 92 public officials, agencies, and interested groups. An open house format was used to facilitate communication and the exchange of information between the Caltrans project team members and members of the public. Attendees were asked to sign-in and were handed a project information sheet. Caltrans staff informed each attendee to view the displays throughout the room, freely ask questions, and place their comments in the comment box provided, or give verbal comments to the court reporter. Display boards were set up around the room provided information about the project and the Caltrans environmental and right-of-way processes. A strip map of the project layout was set up in the middle of the room. Caltrans provided a Spanish interpreter to translate questions and answers. There were a total of 24 attendees at the Public Hearing. Caltrans received 11 comment cards submitted at the public hearing and 1 oral comment submitted to the court reporter. A total of 16 comments were received by mail or sent by email. While there were individual concerns or comments in favor of the project, majority of the comments concerned bicycle access on the San Joaquin River Bridge and the proposed basins adjacent to the San Joaquin River. See Appendix J for comments received during the public review period and Caltrans response to those comments. An aerial map displayed at the Public Hearing is located in Appendix F in this document.

January 14, 2010: Caltrans Environmental, Project Management and Design met with Tom and Aletha Lang of the Aquarius Aquarium Institute in efforts to coordinate and discuss comments and/or concerns outlined in the comments received during the

circulation period for the draft environmental document. Caltrans stated that all comments received during circulation would be formally addressed in the final environmental document. Caltrans Project Management has had continued communication with the Aquarius Aquarium Institute.

January 20, 2010: Caltrans Environmental, Project Management and Design met with Melinda Marks, Executive Officer with the San Joaquin River Conservancy in conjunction with Dave Koehler, Executive Director of the San Joaquin River Parkway and Trust in efforts to coordinate and discuss comments and/or concerns outlined in the comments received during the circulation period for the draft environmental document. Caltrans stated that all comments received during circulation would be formally addressed in the final environmental document.

January 20, 2010: Caltrans Environmental and Design met with Laura Peterson-Diaz, Environmental Scientist with California Department of Fish and Game in efforts to coordinate and discuss comments and/or concerns outlined in the comments received during the circulation period for the draft environmental document. Caltrans stated that all comments received during circulation would be formally addressed in the final environmental document.

February 17, 2010: Caltrans contacted the Fresno County Natural Resources Conservation Service Center and the Madera County Natural Resources Conservation Service Center to concur that an updated Farmland Conversion Impact Rating was not required.

March 10, 2010: Caltrans contacted the City of Fresno regarding the proposed City of Fresno Bicycle Master Plan and the consultant Fehr & Peers drafting the City's Bicycle Master Plan.

March 10, 2010. Caltrans contacted the County of Madera in regards to the City of Fresno's proposed Bicycle Master Plan. The County of Madera stated that they are not currently adopting any new bicycle/pedestrian plans.

Chapter 4 List of Preparers

This document was prepared by the following Caltrans Central Region staff:

Sherry Alexander, Landscape Associate. M.S., Landscape Architecture, California State Polytechnic University, Pomona. Contribution: Prepared Visual Impact Assessment under the direction of Mike Mills, Licensed Landscape Architect, Caltrans District 6.

Jim Bane, Project Manager. B.S., Civil Engineering, California State University, Fresno; 25 years of experience. Contribution: Project Management.

Neil Bretz, Project Manager. B.S., Civil Engineering, California State University, Fresno; 28 years engineering experience. Contribution: Design Manager.

Rajeev Dwivedi, Associate Engineering Geologist. Ph.D., Environmental Engineering, Oklahoma State University, Stillwater; 16 years environmental technical studies experience. Contribution: Prepared Water Quality Assessment Report.

Maya Hildebrand-Garcia, Air Quality Specialist, Parsons (Transportation Group). B.S. Geology, Utah State University; 10 years experience environmental engineering, hazardous waste investigation, air quality regulatory experience. Contribution: Air Quality Study.

Susan M. Gonzalez, Design Engineer. B.S.M.E., Mechanical Engineering, The Catholic University of America; 11 years civil engineering experience. Contribution: Performed preliminary engineering studies in the development of the environmental document for the project.

Susan Greenwood, Associate Environmental Planner. B.S., Environmental Health Science, California State University, Fresno; 17 years environmental health, hazardous waste, and hazardous material management experience. Contribution: Prepared Initial Site Assessment.

Earle Jones, Transportation Engineer. B.S., Civil Engineering; 18 years experience. Contribution: Project management.

David Lanner, Associate Environmental Planner (Archeologist). B.F.A., Art, Utah State University; 12 years cultural resources experience. Contribution:

Prepared Historic Resources Compliance Report, Historical Property Survey Report, Archaeological Survey Report, Geo-archaeological Investigation Report.

Irene Lee, Design Engineer. B.S., Civil Engineering, California State Polytechnic University, Pomona; 10 years project development experience. Contribution: Provided preliminary project design information and files.

Joseph Llanos, Graphic Designer III. B.A., Graphic Design, California State University, Fresno; 12 years visual design and public participation experience. Contribution: Designed graphics and maps.

G. William "Trais" Norris, III, Senior Environmental Planner. B.S., Urban Regional Planning, California State Polytechnic University, Pomona; 9 years land use, housing, redevelopment, and environmental planning experience. Contribution: Reviewed environmental documentation.

Sarah Paulson, Environmental Planner (Biologist). B.S., Molecular Environmental Biology, University of California, Berkeley; 4 years biological resource assessment experience. Contribution: Prepared Natural Environment Study and Biological Assessment.

Som Phongsavanh, Associate Environmental Planner. B.S., Biology, California State University, Fresno; 8 years environmental planning experience. Contribution: Coordinated the environmental process for the project.

Michelle Turner Ray, Associate Environmental Planner. B.S. Environmental Toxicology, University of California, Riverside; 3 years planning experience. Contribution: Wrote Initial Study and coordinated the environmental process for the project.

Vladimir Cristian Timofei, Transportation Engineer. M.S., Civil Engineering, California State University, Fullerton; 11 years environmental engineering experience. Contribution: Noise Study.

Phillip Vallejo, Environmental Planner (Architectural History). B.A., History, California State University, Fresno; 7 years architectural history experience. Contribution: Prepared architectural history memo.

Chuck Wright, Project Engineer. B.S., Mechanical Engineering. California State University, Fresno; 10 years engineering experience. Contribution: Performed preliminary engineering studies required during the environmental document development for the project.

Jun Xu, Design Manager. M.S. Civil Engineering. University of Washington, MBA, Business Administration, California State University, Fresno, 20 years engineering experience. Contribution: Managed engineering studies and preparation of the Project Report

Appendix A California Environmental Quality Act Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

Supporting documentation of all California Environmental Quality Act checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts and avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapter 2.

I. AESTHETICS: Would the project:

a) Have a substantial adverse effect on a scenic vista	☐	☐	☐	X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	X	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	X	☐	☐

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?	☐	☐	X	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	X
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))?	☐	☐	☐	X
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	X
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?	☐	☐	☐	X

II. 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?	☐	☐	☐	X

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	X
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)?	☐	☐	☐	X
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	X
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	X
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?	☐	X	☐	☐
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?	☐	X	☐	☐
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?	☐	X	☐	☐
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?	☐	☐	X	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	X
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?	☐	X	☐	☐
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☐
Archaeological resources are considered “historical resources” and are covered under item a) above				
c) Directly or indirectly destroy a unique paleontological	☐	X	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
resource or site or unique geologic feature?				
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	X
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?	☐	☐	☐	X
ii) Strong seismic ground shaking?	☐	☐	☐	X
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	X
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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	☐	X	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	X	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
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?	☐	☐	☐	X
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	X	☐
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)?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	X	☐

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
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?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
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?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	X
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	X
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?	☐	☐	☐	X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	X	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X
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?	☐	☐	☐	X

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
) 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?	☐	☐	☐	X
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)?	☐	☐	☐	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
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?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
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,	☐	☐	☐	X

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
pedestrian and bicycle paths, and mass transit?				
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?	☐	☐	X	☐
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?	☐	☐	☐	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	X
e) Result in inadequate emergency access?	☐	☐	☐	X
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?	☐	☐	☐	X
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	X	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X
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?	☐	☐	☐	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	X
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)?	☐	☐	☐	X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	X

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEG

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex y
Be energ

August 25, 2009

TITLE VI
POLICY STATEMENT

The California State 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.

Randell H. Iwasaki

RANDELL H. IWASAKI
Director

Appendix C Minimization and/or Mitigation Summary

Environmental commitments for the proposed project are described in the Avoidance, Minimization and/or Mitigation sections in their respective environmental categories in this Initial Study. This section summarizes these environmental commitments and Environmental Assessment by impact area.

Utilities and Emergency Services

A Transportation Management Plan would be implemented to ensure timely access for first responders. The added capacity would improve response time once the project is complete. A preliminary Traffic Management Plan has been developed for this project and would be updated in the final design phase. The majority of the construction of the project is located within the median and would require a reduction of existing lane widths during construction. Traffic control would be necessary during the construction of all shoulders, lanes and the San Joaquin River Bridge

Traffic and Transportation/Pedestrian and Bicycle Facilities

A Traffic Management Plan would be developed to minimize delays and maximize safety for the motorist during construction. The Traffic Management Plan would include, but is not limited to:

- Use of portable changeable message signs.
- Off peak and night work and project phasing.
- Incident management through a Construction Zone Enhancement Enforcement Program and traffic surveillance stations.
- Release of information such as brochures, mailers and media releases through Caltrans Public Information Office.

Visual Impacts

Replacement planting must be funded from the highway construction project and must be under construction within two years of the acceptance of the highway contract that removed the highway planting.

In addition, the following measures would avoid and/or minimize visual impacts:

- Minimize the effect of removal of median oleander and highway planting of eucalyptus trees by providing funds for replacement planting within the project area in accordance with established Caltrans policy for replacement planting.
- Minimize the urban look of the concrete barriers by staining the barriers to visually match the color and incorporate any architectural details of the existing concrete median barrier through the City of Fresno and Madera County.

- Minimize obstruction of views from the San Joaquin River Bridge by providing a bridge barrier at the lowest possible height, within the limits of sound engineering judgment and traffic safety requirements. Design a bridge barrier that allows visual access through the barrier can also accomplish this objective.
- Minimize visual inconsistencies and encroachment on the San Joaquin River Parkway recreational area by providing a bridge design rural in character. This can be accomplished by using the same or similar deck design as the existing steel deck truss bridge or architectural features in keeping with a rural environment. Without either construction of a rural-type design or incorporation of architectural features in keeping with the rural environment, there will likely be a visual impact (per CEQA guidelines) to users of the San Joaquin River Parkway.

Archaeological Resources

- All four areas of planned excavation for the construction of the two biofiltration swales, the infiltration basins, and the removal of the San Joaquin River Bridge would be monitored by the Caltrans Archaeologist.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that 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 5097.98At this time, the person who discovered the remains would contact Mandy Marine, Caltrans Native American Coordinator so that they may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Hydrology/Floodplain

- Biofiltration swales and an infiltration basin would function as stormwater management measures for the project.
- Roadway drainage facilities would be expanded to accommodate the proposed roadwork.

Water Quality

The project would have direct construction within the San Joaquin River. Management measures and Best Management Practices (BMPs) would be needed to address Water Quality impacts during planning, design, construction, and operational and maintenance stages. Management measures include the following:

- Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss.
- Limit land disturbances such as clearing and grading and cut/fill to reduce erosion and sediment loss.
- Limit disturbance of natural drainage features and vegetation.
- Place bridge structures so that sensitive and valuable aquatic ecosystems are protected.
- Place bridge structures so that sensitive and valuable aquatic ecosystems are protected.
- Prepare and implement an approved Storm Water Pollution Prevention Plan (SWPP).
- Ensure proper storage and disposal of toxic material.
- Incorporate pollution prevention into operation and maintenance procedures to reduce pollutant loadings to surface runoff.
- Develop and implement runoff pollution controls for existing road systems to reduce pollutant concentrations and volumes.

The project would need to comply with the requirements specified in the Caltrans Standard Specifications Section 7, Legal Relations and Responsibility, subsection 7-1.01G. When disturbed acreage is 1 acre or more, Caltrans' National Pollutant Discharge Elimination System Permit requires coordination with the Regional Water Quality Control Board. This project is expected to disturb more than 1 acre of soil, and requires the following:

1. A Notification of Construction is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
2. A Storm Water Pollution Prevention Plan is to be prepared prior to and implemented during construction to the satisfaction of the Resident Engineer.
3. A Notice of Completion of Construction is to be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site.

Paleontological Resources

Before construction, mitigation measures outlined in the Paleontological Evaluation Report would be implemented to reduce potential adverse impacts to substantial paleontological resources resulting from construction. In areas determined to have a

high potential for significant paleontological resources, an adequate program for mitigating the impact for development should include:

- A preliminary survey and surface salvage prior to construction.
- Monitoring and salvage during excavation.
- Preparation, including screen washing to recover small specimens (if applicable), and specimen preparation to a point of stabilization and identification.
- Identification, cataloging, curation, and storage of specimens.
- A final report shall be prepared of the finds and their significance, after all operations are complete.

The site specific Paleontological Mitigation Plan (PMP) would assist Caltrans in complying with environmental laws and regulations requiring mitigation of adverse impacts on paleontological macrofossil resources if found within the project. The components of the PMP are:

- A qualified principal paleontologist (M.S. or PhD in paleontology or geology familiar with paleontological procedures and techniques) would be retained to be present at pre-grading meetings to consult with grading and excavation contractors.
- A paleontological monitor, under the direction of the qualified principal paleontologist, would be onsite to inspect cuts for fossils at all times during original grading involving sensitive geologic formations.
- When fossils are discovered, the paleontologist (or paleontological monitor) would recover them. Construction work in these areas would be halted or diverted to allow recovery of fossil remains in a timely manner.
- Fossil remains collected during the monitoring and salvage portion of the mitigation program would be cleaned, repaired, sorted, and cataloged.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, would then be deposited in a scientific institution with paleontological collections.
- A final report would be completed that outlines the results of the mitigation program.

Hazardous Waste

Biofiltration Swales

- Shallow soil excavated from this area should be suitable for reuse as structural fill within the highway corridor. Unsuitable metal and concrete debris materials

should be segregated and appropriately disposed of. Fill materials containing asphalt emulsion should be placed outside of flood plain areas or beneath pavement and at least 5 feet above groundwater.

- A Health and Safety Plan is recommended for this area in order to minimize worker exposure to petroleum hydrocarbons. Mitigation costs and fees may apply to this project. The appropriate Caltrans Standard Special Provisions would apply and be provided prior to construction activities. A permitting fee may be required by the Fresno County Environmental Health Department and the Central Valley Regional Water Quality Control Board.

San Joaquin River Bridge

- The paint on the bridge is intact and considered Category II. The contractor shall be responsible for informing the landfill of the contractor's intent to dispose of architectural components containing intact lead-based paint. Specific specifications will be indicated in the contract.
- It is recommended that all paints at the project location should be treated as lead containing for purposes of determining the applicability of the Cal/OSHA lead standard during any future maintenance, renovation, and demolition activities.
- Written notification to the San Joaquin Valley Air Pollution Control District is required 10 working days prior to commencement of any demolition activity, in accordance with Regulation IV, Rule 4002.

Air Quality

- The project would be subject to a Dust Control Permit from the San Joaquin Unified Air Pollution Control District. Following the District's Regulation VIII requirements and the Caltrans Non-Standard Special Provisions for Dust should minimize the effect of dust during construction.
- If required the contractor would submit to Air District Rule 9510 Air Impact Analysis and pay any mitigation fees. The provisions of Caltrans Standard Specifications, Section 7-1/OF "Air Pollution Control" and Section 10 "Dust Control" requires the contractor to comply with the San Joaquin Valley Air Pollution Control District's rules, ordinances, and regulations.

Noise

- Use newer, or well-maintained, equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement

measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational.

- Use construction methods or equipment that would provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.
- Temporary noise barriers shall be used and relocated, as needed, to protect sensitive receptors against excessive noise from construction activities. Noise barriers can be made of heavy plywood or moveable insulated sound blankets
- Implement a construction noise and vibration monitoring program to limit the impacts.
- Plan noisier operations during times of least sensitivity to receptors.
- Keep noise levels relatively uniform and avoid impulsive noises.
- Maintain good public relations with the community to minimize objections to the unavoidable construction impacts. Provide frequent activity update of all construction activities.

Natural Communities/Riparian Habitat

- Establish environmentally sensitive areas, marked by the erection of orange mesh fencing, before construction, for each avoided riparian tree. The environmentally sensitive areas would extend to a dripline protection area for each.
- Replant native riparian trees in-kind at a 3:1 ratio for trees between 4 to 25 inches diameter at breast height as part of the required compensatory mitigation. Trees over 25 inches diameter at breast height are defined as ‘heritage’ trees and require replanting at the higher ratio of 10:1.

Wetlands and other Waters

- Establish an environmentally sensitive area marked by orange mesh fencing before construction to avoid unplanned accidental construction-related impacts to waters.
- Jurisdictional waters of the United States would be affected by the proposed project activities, requiring a Section 404 Nationwide Permits (NWP) #14 and 33 from ACOE as well as a Section 401 certification from Regional Water Quality Control Board. In addition, a 1602 Streambed Alteration Agreement from the California Department of Fish and Game would be required for work within or adjacent to the San Joaquin River.

- Terms, conditions, and provisions provided within Streambed Alteration Agreements, CWA Section 404 permits, and CWA Section 401 permits are designed to minimize and avoid impacts to the waterway. Caltrans would receive these permits and would include these permits in the solicitation for contractor bid information. In addition, the project would incorporate standard Caltrans best management practices to prevent impacts related to degradation of water quality.

To ensure no net loss of waters of the United States, one or more of the following options would compensate for the permanent loss of waters:

- Payment of the appropriate mitigation fee (Bailey comment: Check section 2.3.2 Wetlands Mitigation for update to bullet point)
- Dedication of mitigation lands
- Purchase of approved mitigation bank credits
- Development of an alternative mitigation plan
- Waters of the United States compensation would be at a 3:1 ratio. When compensating at a 3:1 ratio, at least one acre of aquatic habitat creation must be provided for every acre of impact; the remaining two acres may be provided in the form of either creation or preservation.

Biological Resources

Animal Species

- Remove trees, shrubs and other vegetation before the nesting season of migratory birds. If nests must be removed, the removal would occur during the time of year when the nests are not used (approximately September 2 to February 14).
- Perform a preconstruction survey for migratory birds within the biological study area and adjacent habitat no fewer than 14 days and no more than 30 days before the project starts. Temporarily suspend work if nesting activity cannot be prevented. Standard specifications would be included in the construction bid package to avoid impacts to migratory birds.

Threatened or Endangered Species:

Swainson's Hawk

- Conduct reconstruction surveys for Swainson's hawk no fewer than 14 days and no more than 30 days prior to project commencement
- Coordinate with California Department of Fish to monitor any active nests

- Ensure that the project does not interfere with the hawk's breeding activities

Valley Elderberry Longhorn Beetle

- Designate the eight elderberry shrubs that would be avoided as environmentally sensitive areas and avoid the area a minimum of 20 feet from the edge of shrub canopy drip-line
- Install orange mesh fencing prior to construction within the Caltrans right-of-way to avoid accidental and indirect construction-related impacts to the elderberry shrubs
- Transplant EB-1 and EB-9 as part of mitigation measures, as well as establishing elderberry seedlings and associated native plants at an appropriate mitigation site to be preserved in perpetuity according to the *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (See Appendix E).
- Establish 19 elderberry seedlings and 19 associated native plants at an appropriate mitigation site to be preserved in perpetuity according to the *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS 1999).
- Perform an elderberry shrub survey to verify actual stems to be removed by the proposed project within one year of construction (Caltrans would perform)

Special Concern/Sensitive Animal Species

- Conduct exclusion measures prior to demolition of each side of the bridge to prevent bat species from roosting within the expansion gaps of the San Joaquin River Bridge.
- Install exclusionary features, if necessary, while the bats are away from the roost prior to April 15 of the construction year, so that no exclusions would take place during the maternity season.
- The new bridge design would replace removed bat habitat to provide for the same size population or more. Bat habitat may be in the form of bat boxes embedded within the structure or attached externally.

Invasive Species

- Properly maintain and clean all equipment and vehicles before bringing them on-site to avoid transporting dirt and seed material to the project site
- Use erosion control measures free of noxious weed materials
- Ensure any fill material brought on-site is free of noxious weed materials.
- Should there be a need for off-site disposal of excess fill at the end of construction, take special care to prevent the spread of noxious weeds

- Properly maintain and clean all equipment and vehicles before leaving the project site to avoid transporting dirt and seed material to other sites

Appendix D Farmland Conversion Impact Rating

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 1/7/09	4. Sheet 1 of 1
1. Name of Project **Island Park Six Lane Project**	5. Federal Agency Involved **Caltrans and FHWA**	
2. Type of Project **Transportation**	6. County and State **Madera, CA.**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **1/13/09**	2. Person Completing Form G. FOED
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated | Average Farm Size
5. Major Crop(s) **Trees & Vines**	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: **3.2** 52 %
8. Name Of Land Evaluation System Used **Arc Map**	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS **3/18/09**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	6			
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	6	0	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	3			
B. Total Acres Statewide And Local Important Farmland	3			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	67			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15	15			
2. Perimeter in Nonurban Use	10	8			
3. Percent Of Corridor Being Farmed	20	12			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	5			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availabliity Of Farm Support Services	5	0			
8. On-Farm Investments	20	15			
9. Effects Of Conversion On Farm Support Services	25	5			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	60	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	67			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	60	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	127	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: [signature] DATE 3/20/09

NOTE: Complete a form for each segment with more than one Alternate Corridor

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 1/7/09	4. Sheet 1 of 1
1. Name of Project **Island Park Six Lane Project**	5. Federal Agency Involved **Caltrans and FHWA**	
2. Type of Project **Transportation**	6. County and State **Fresno, CA.**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **1/13/09**	2. Person Completing Form **B. Champion**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐	4. Acres Irrigated **1,297,400** / Average Farm Size **280**	
5. Major Crop(s) **Grapes, Row Crops, Orchards**	6. Farmable Land in Government Jurisdiction Acres: **1,298,400** 34 %	7. Amount of Farmland As Defined in FPPA Acres: **N/A** %
8. Name Of Land Evaluation System Used **California Storie System**	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS **1/14/09**

PART III *(To be completed by Federal Agency)*		Alternative Corridor For Segment			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		9			
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		9	0	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*					
A. Total Acres Prime And Unique Farmland		9			
B. Total Acres Statewide And Local Important Farmland		0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.00066			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		N/A			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*					
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points	24			
1. Area in Nonurban Use	15	12			
2. Perimeter in Nonurban Use	10	1			
3. Percent Of Corridor Being Farmed	20	12			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	5			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availablility Of Farm Support Services	5	0			
8. On-Farm Investments	20	4			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	34	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	24			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	34	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	58	0	0	0

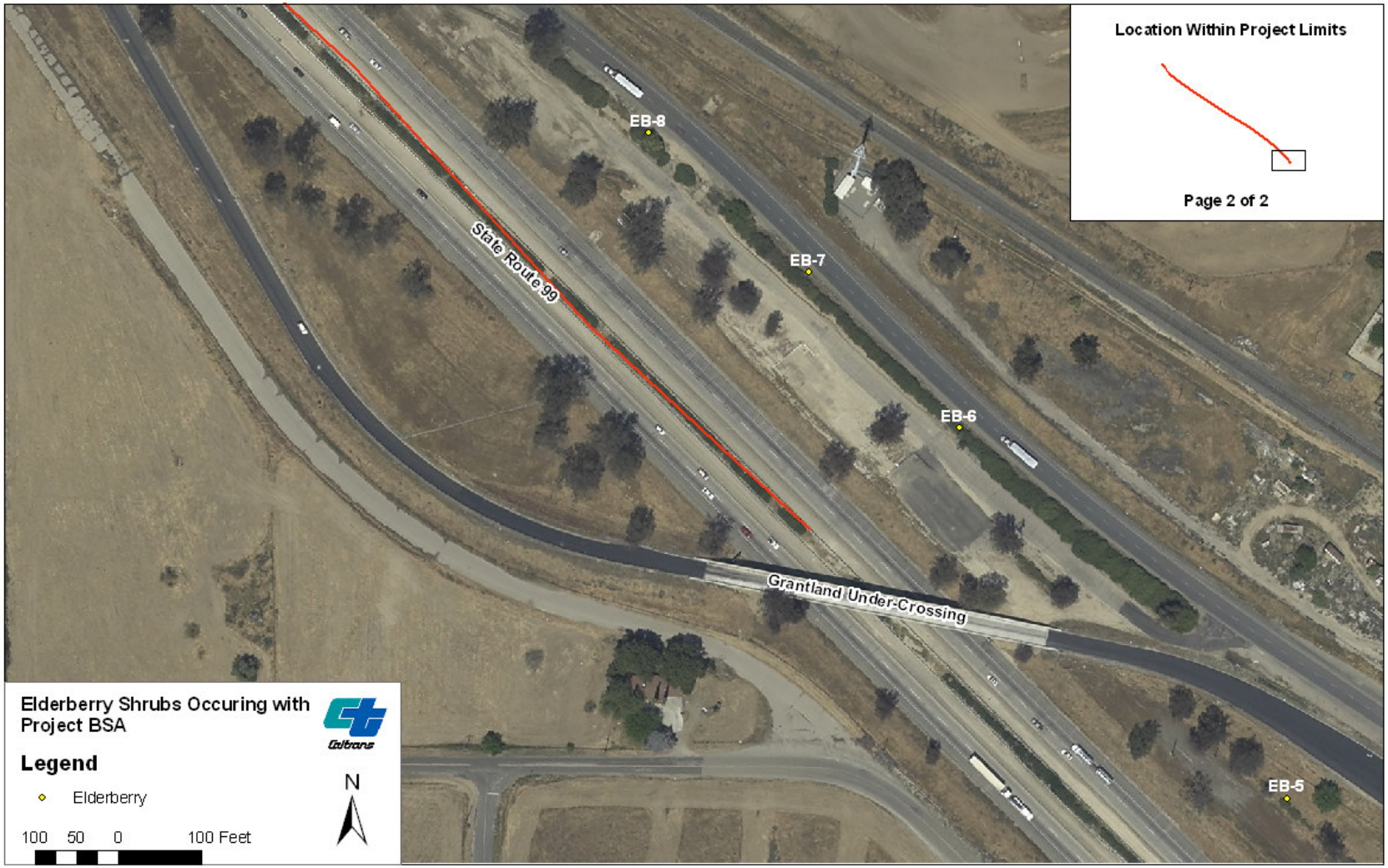
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
			YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: Michelle Flores Tavares DATE 01/15/09

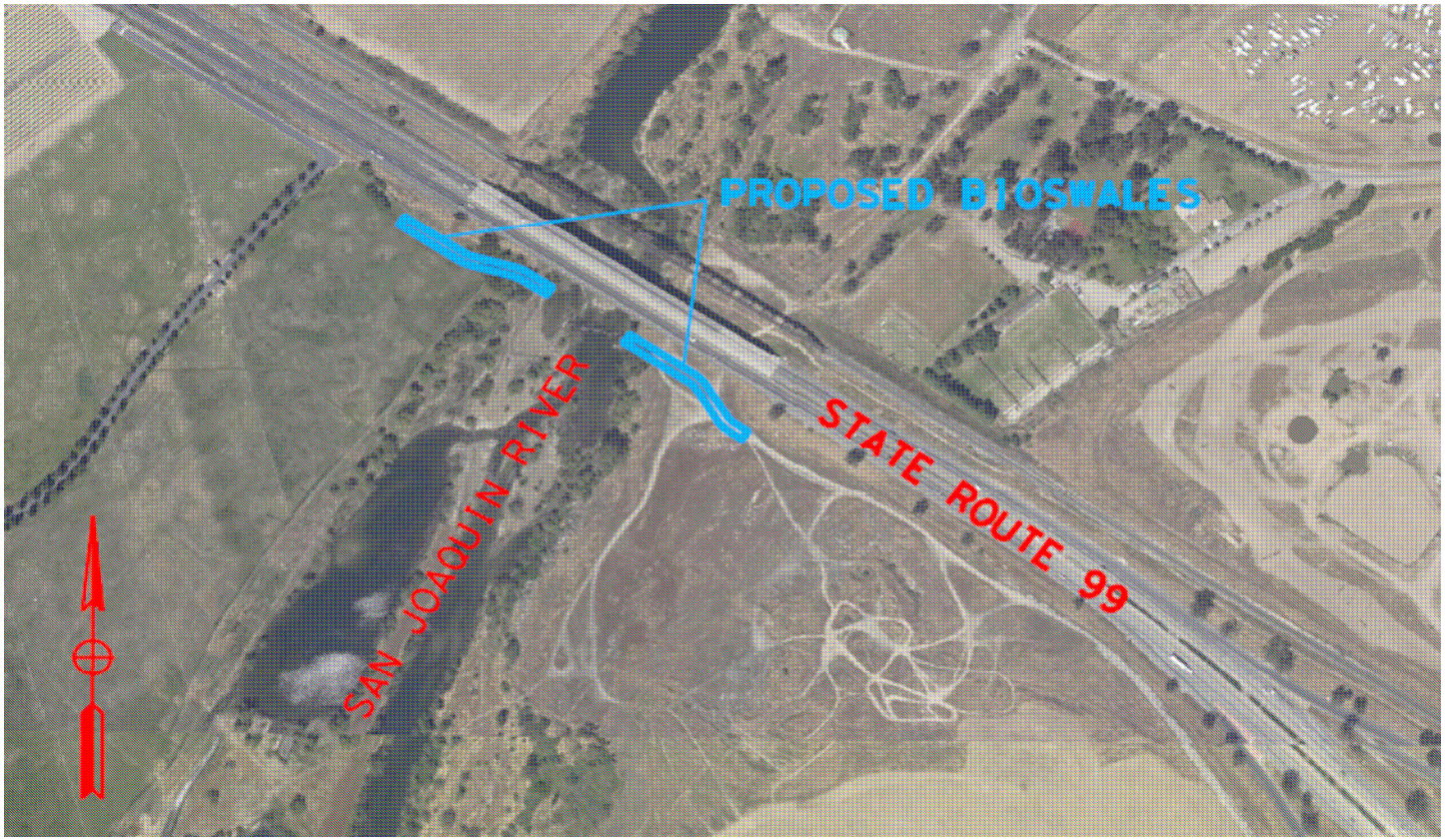
NOTE: Complete a form for each segment with more than one Alternate Corridor

Appendix E Elderberry Location Maps


Location Within Project Limits
Page 2 of 2
EB-8
EB-7
EB-6
EB-5
State Route 99
Grantland Under-Crossing
Elderberry Shrubs Occuring with Project BSA
Legend
Elderberry
100 50 0 100 Feet
N
Caltrans

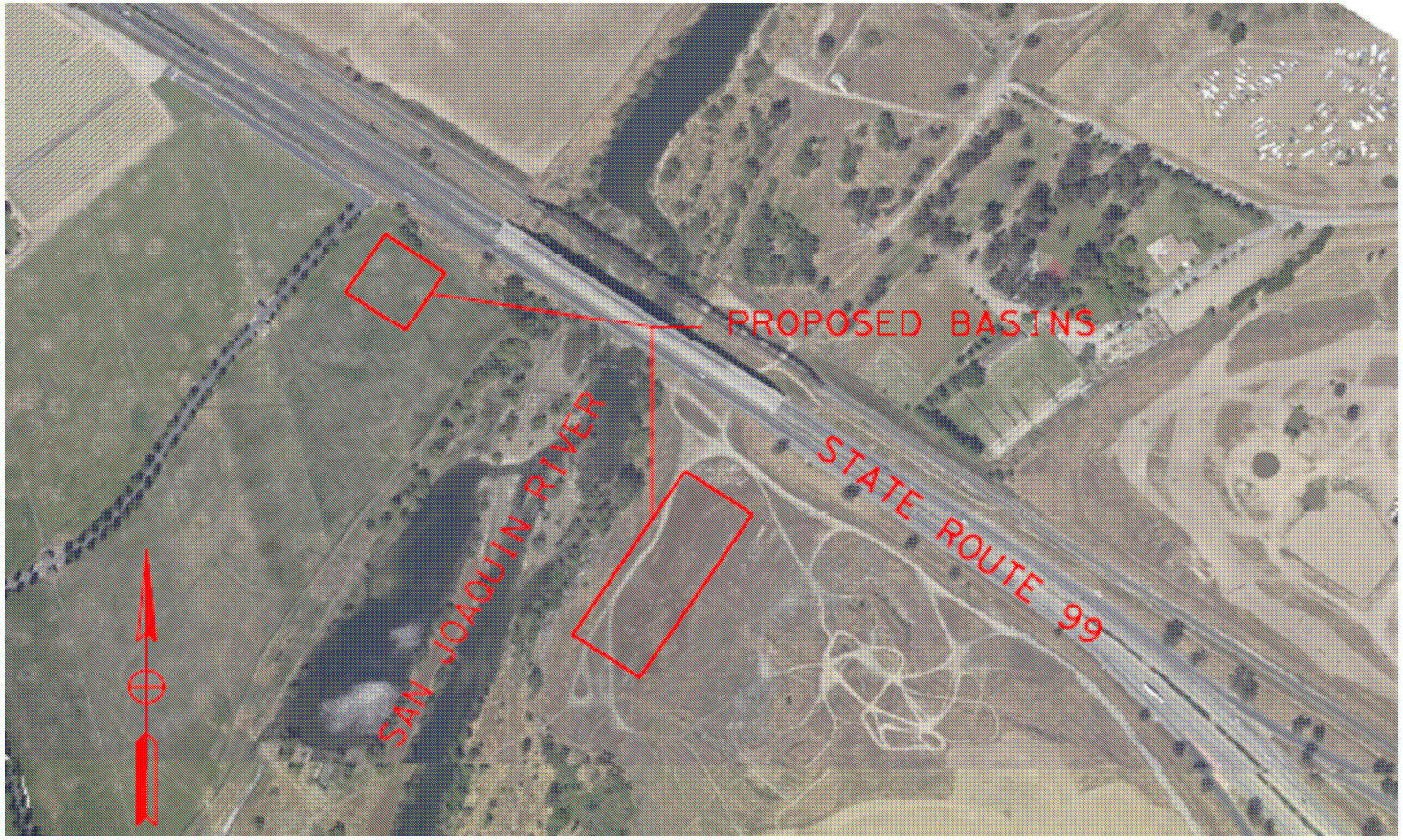
Appendix F Biofiltration Swale and Infiltration Basin Location Map

Biofiltration Swales located north and south of the San Joaquin River. This stormwater treatment measure would replace the previously proposed basins at this location (see Image 2 for previously proposed basins).



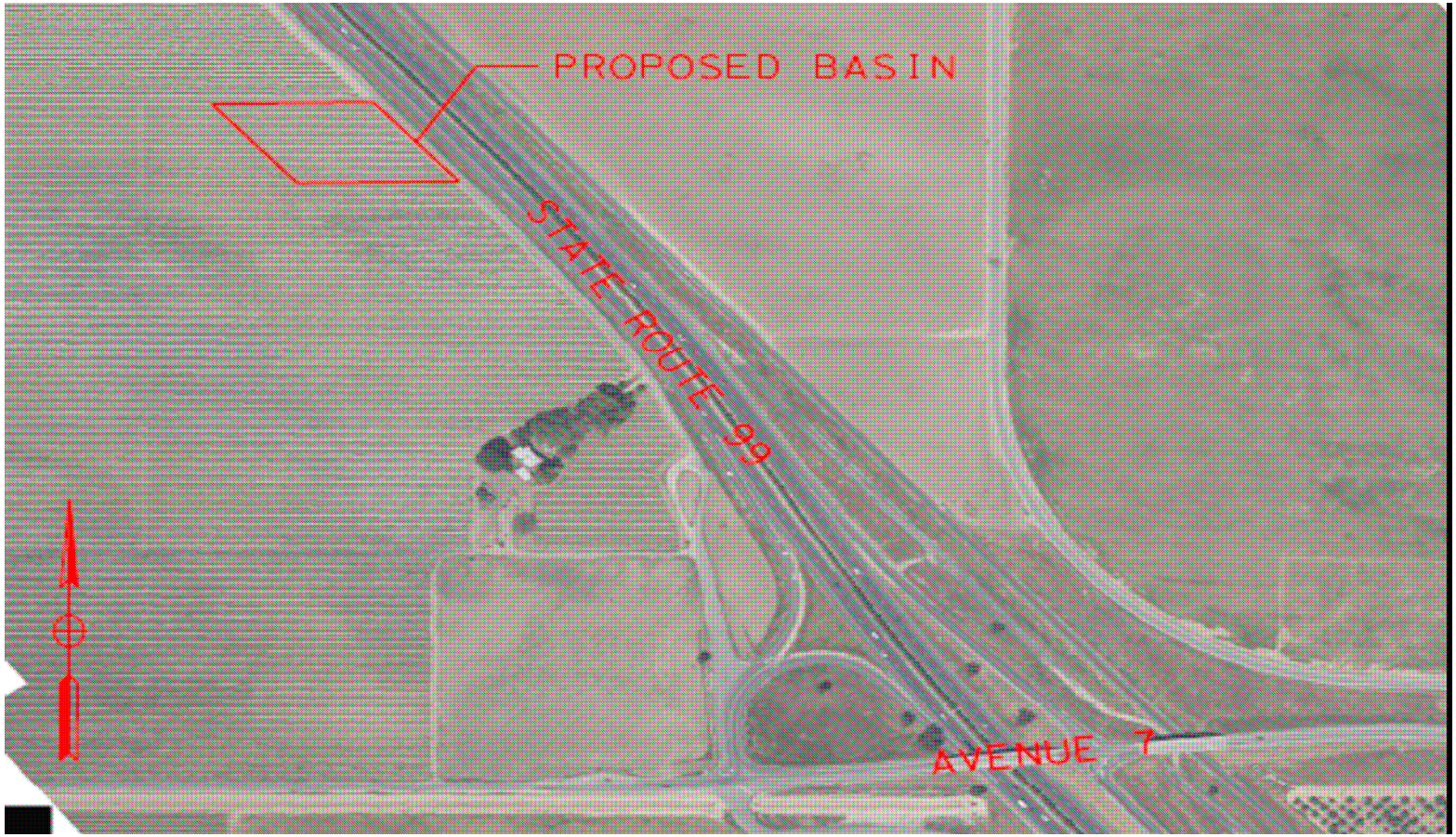
(Image 1)

Previously proposed basins to be replaced with biofiltration swales



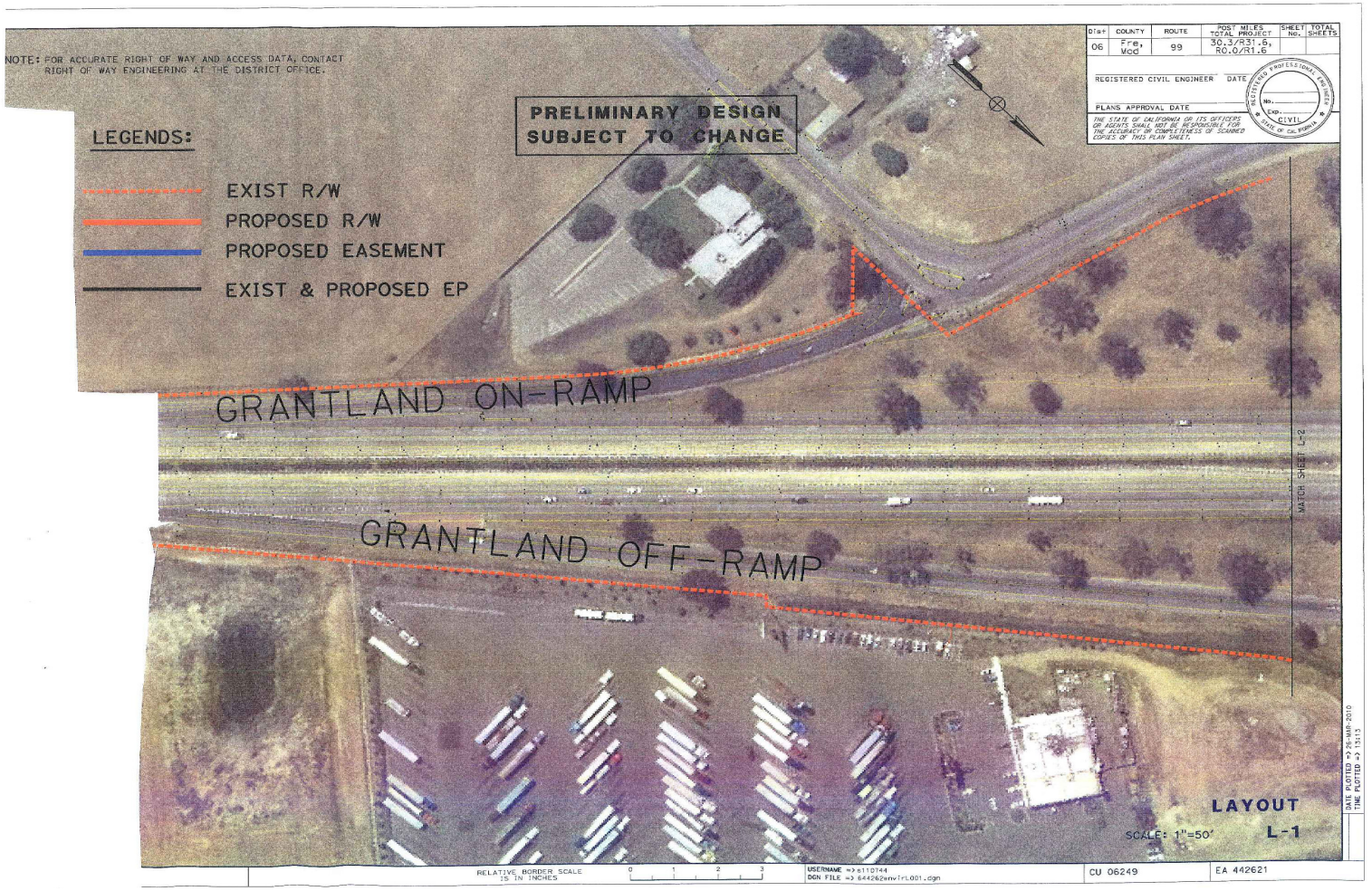
(Image 2)

Infiltration basin located north of the Avenue 7 overcrossing

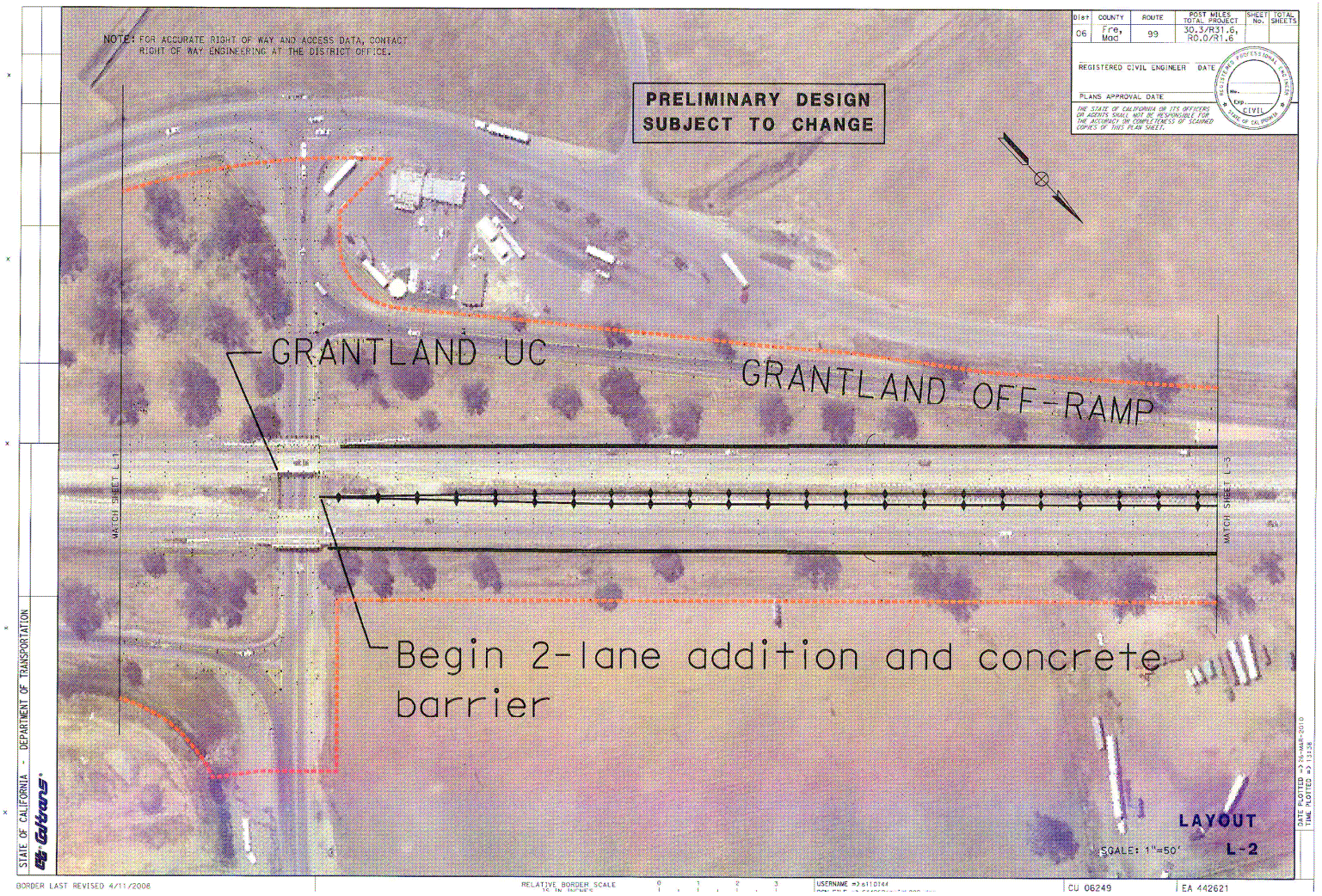


(Image 3)

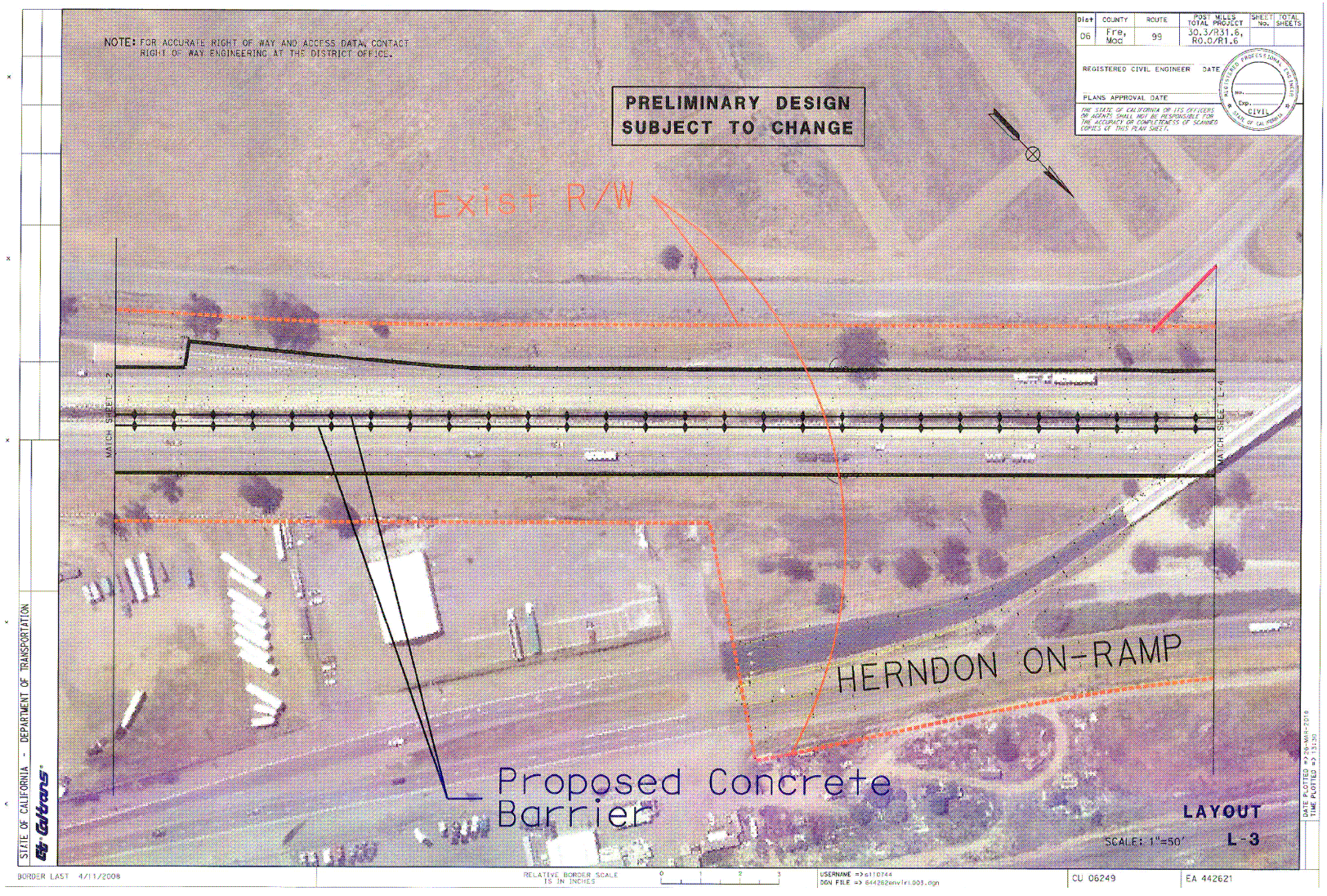
Images 4-15 comprise of the aerial strip map made available for viewing at the Public Hearing on June 24, 2009



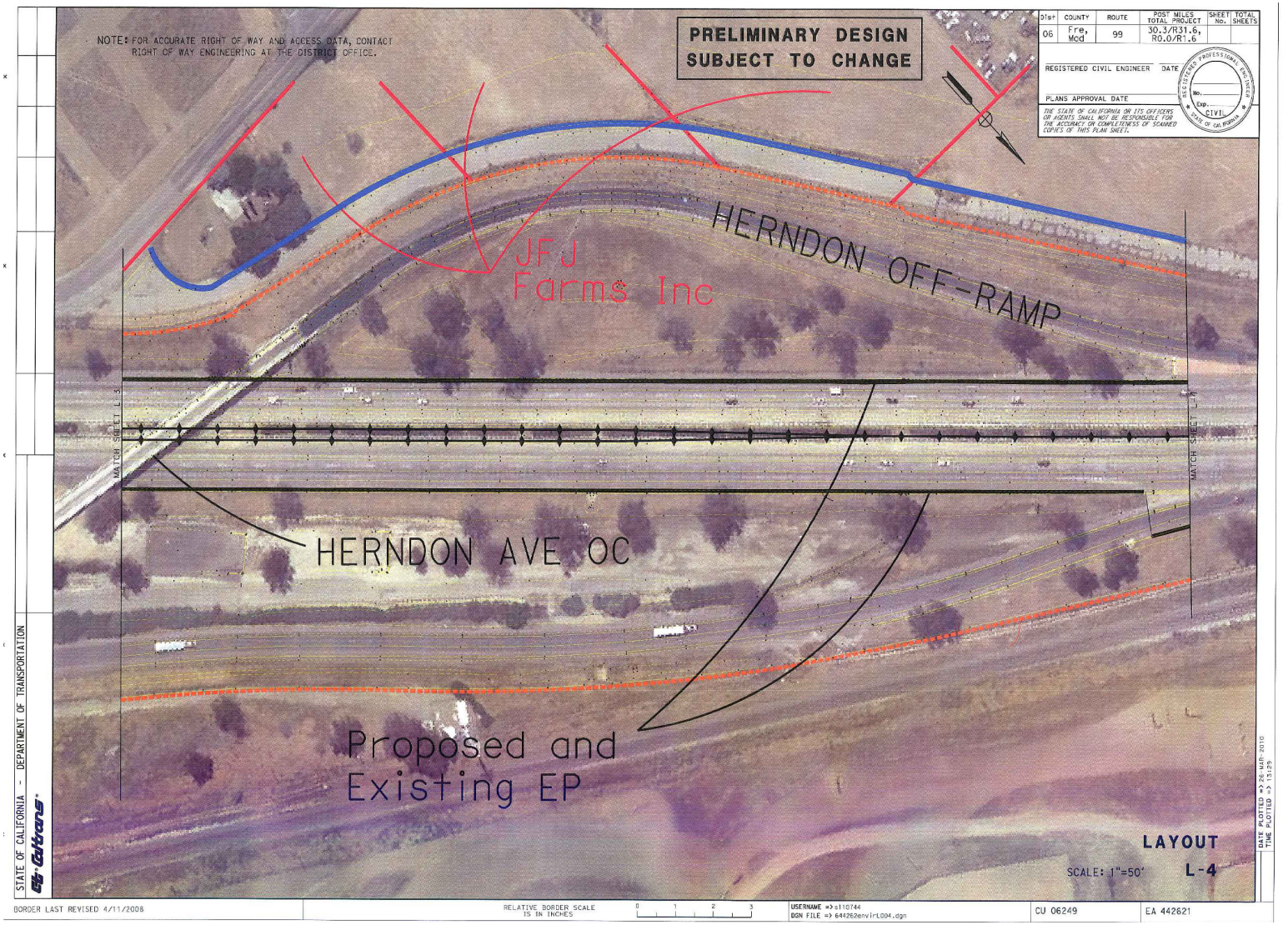
(Image 4)


NOTE: FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
PRELIMINARY DESIGN SUBJECT TO CHANGE
Dist 06
COUNTY Fre, Mad
ROUTE 99
POST MILES TOTAL PROJECT 30.3/R31.6, R0.0/R1.6
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
GRANTLAND UC
GRANTLAND OFF-RAMP
Begin 2-lane addition and concrete barrier
MATCH SHEET L-1
MATCH SHEET L-3
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
LAYOUT
L-2
SCALE: 1"=50'
BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE
USERNAME =>
CU 06249
EA 442621
DATE PLOTTED =>
TIME PLOTTED =>

(Image 5)


NOTE: FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
PRELIMINARY DESIGN SUBJECT TO CHANGE
Exist R/W
HERNDON ON-RAMP
Proposed Concrete Barrier
LAYOUT
L-3
SCALE: 1"=50'
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
BORDER LAST 4/11/2008
CU 06249
EA 442621

(Image 6)


NOTE: FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
PRELIMINARY DESIGN SUBJECT TO CHANGE
Dist 06
COUNTY Fre, Mod
ROUTE 99
POST MILES TOTAL PROJECT 30.3/R31.6, R0.0/R1.6
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA
JFJ Farms Inc
HERNDON OFF-RAMP
MATCH SHEET L-3
MATCH SHEET L-5
HERNDON AVE OC
Proposed and Existing EP
LAYOUT
SCALE: 1"=50'
L-4
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DATE PLOTTED => 26-MAR-2010
TIME PLOTTED => 13:29
BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES
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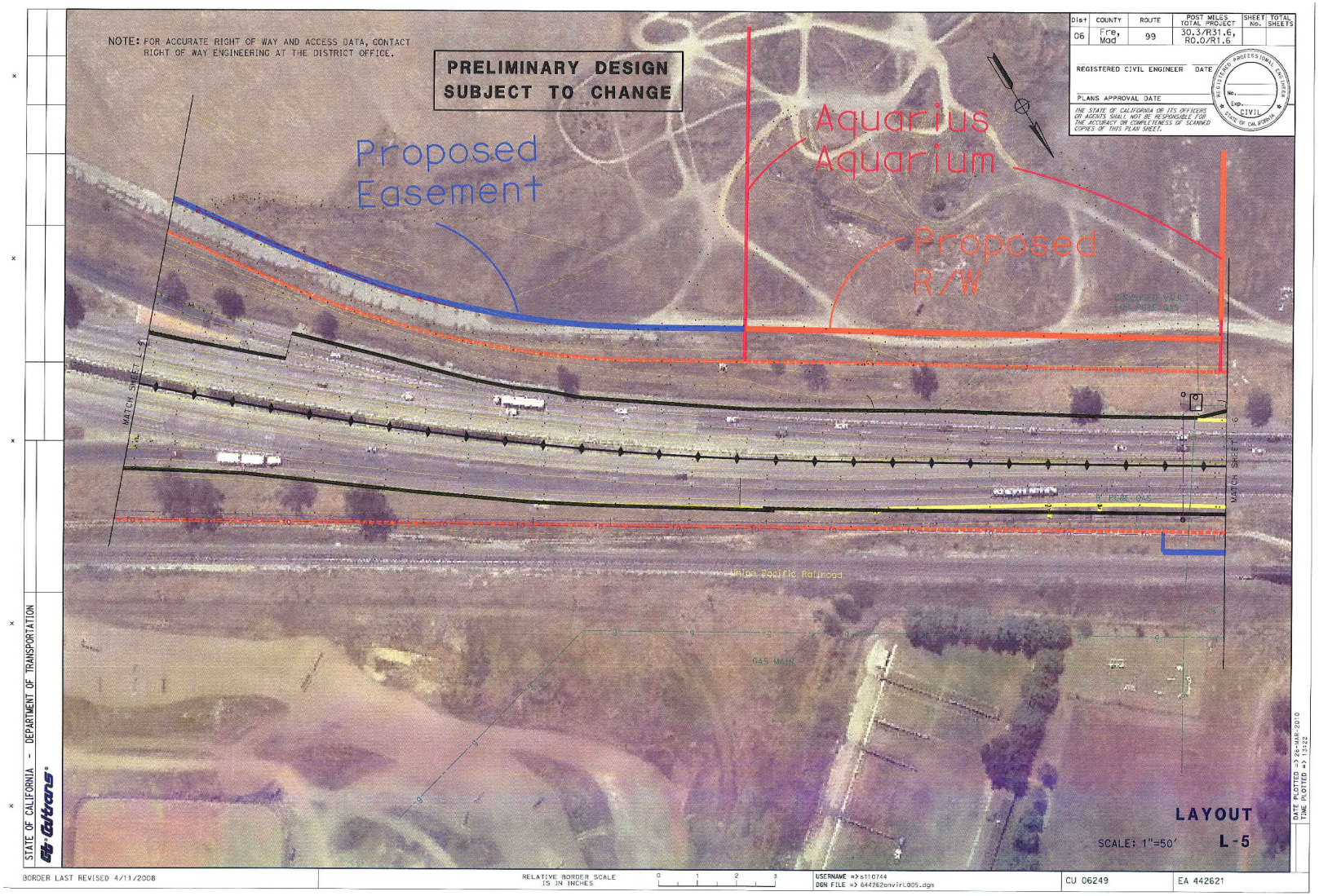
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Proposed R/W
Union Pacific Railroad
GAS MAIN
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MATCH SHEET L-6
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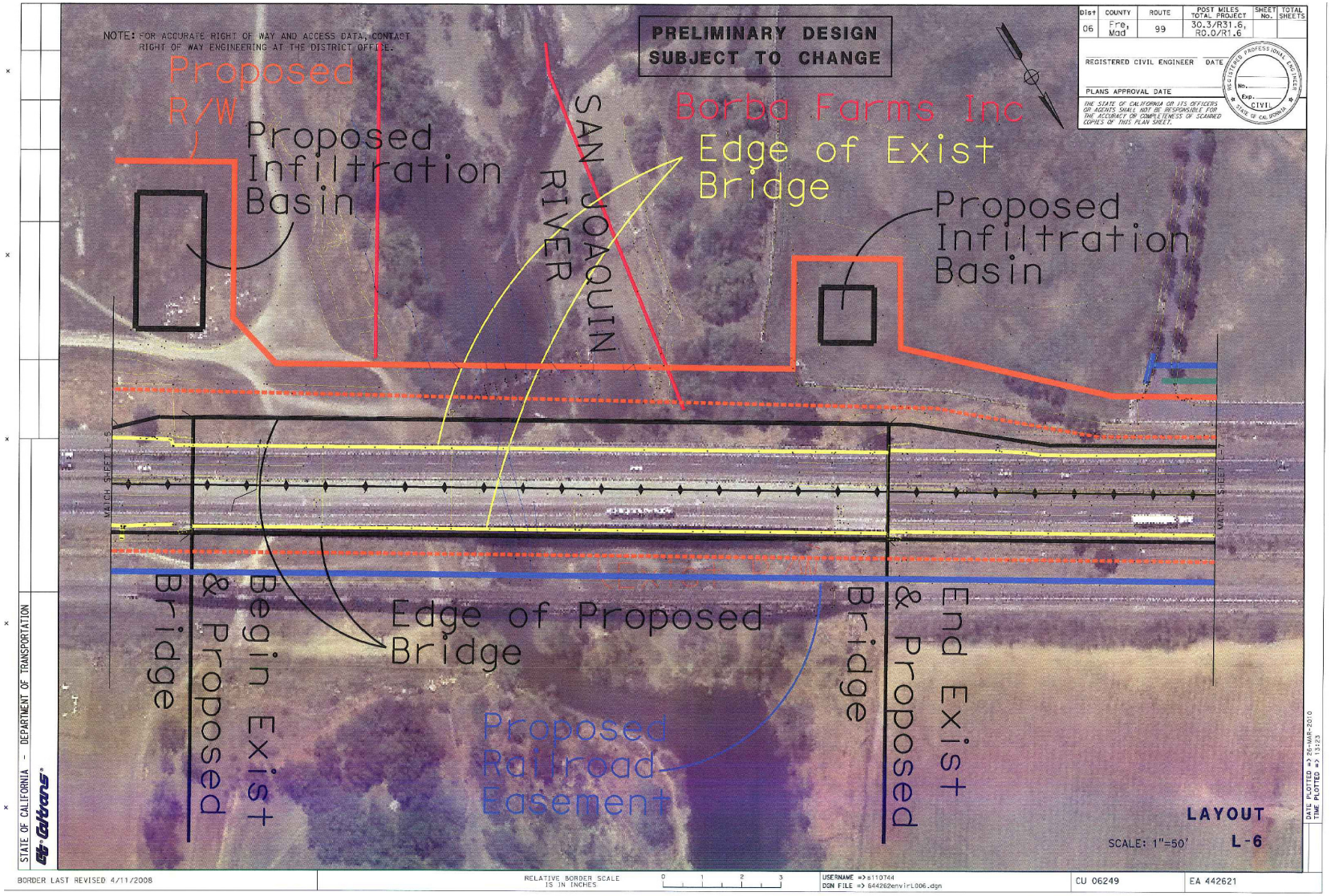
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SAN JOAQUIN RIVER
Borba Farms Inc
Edge of Exist Bridge
Proposed Infiltration Basin
Begin Exist & Proposed Bridge
Edge of Proposed Bridge
Proposed Railroad Easement
End Exist & Proposed Bridge
MATCH SHEET L-5
MATCH SHEET L-7
LAYOUT
SCALE: 1"=50'
L-6
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
BORDER LAST REVISED 4/11/2008
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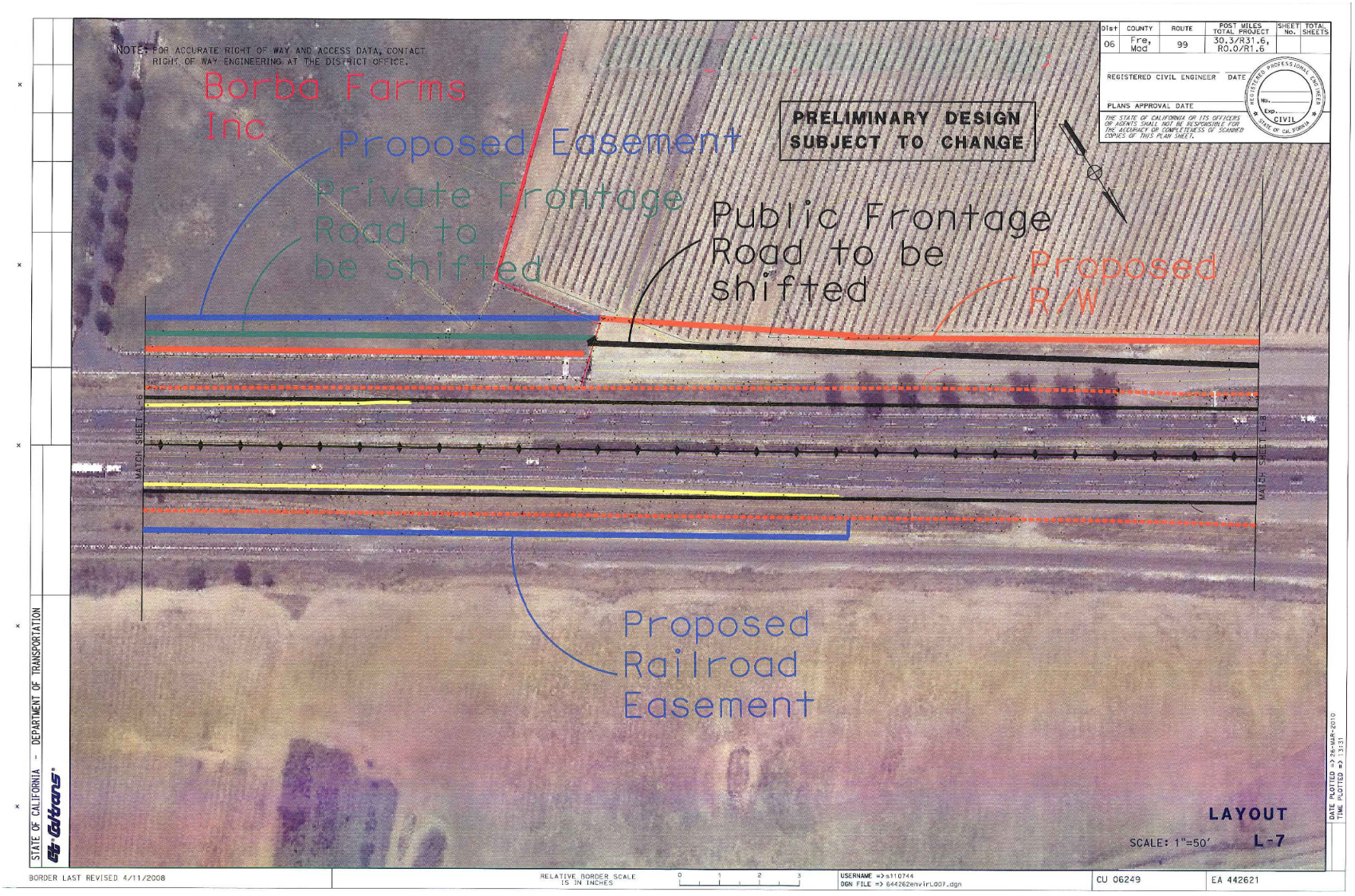
CU 06249
EA 442621

(Image 9)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Private Frontage Road to be shifted
Public Frontage Road to be shifted
Proposed R/W
PRELIMINARY DESIGN SUBJECT TO CHANGE
Proposed Railroad Easement
MATCH SHEET L-8
MATCH SHEET L-8
Dist 06
COUNTY Fre, Mad
ROUTE 99
POST MILES TOTAL PROJECT 30.3/R31.6, R0.0/R1.6
SHEET No.
TOTAL SHEETS
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PLANS APPROVAL DATE
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No.
Exp.
CIVIL
STATE OF CALIFORNIA
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
LAYOUT
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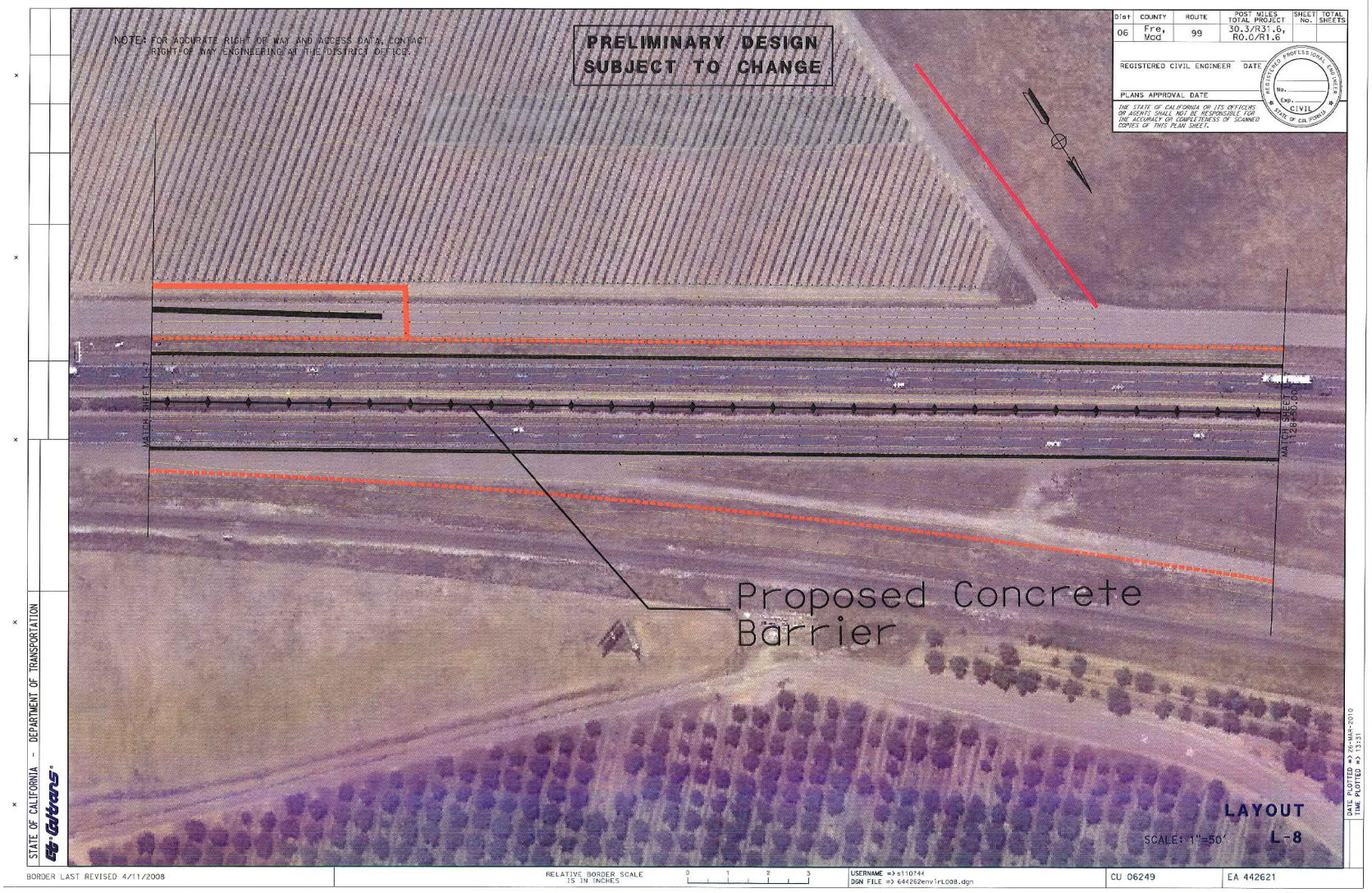
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COUNTY
ROUTE
POST MILES TOTAL PROJECT
SHEET No.
TOTAL SHEETS
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30.3/R31.6, R0.0/R1.6
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
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CIVIL
STATE OF CALIFORNIA
MATCH SHEET L-7
MATCH SHEET L-9
128+50.00
Proposed Concrete Barrier
LAYOUT
SCALE: 1"=50'
L-8
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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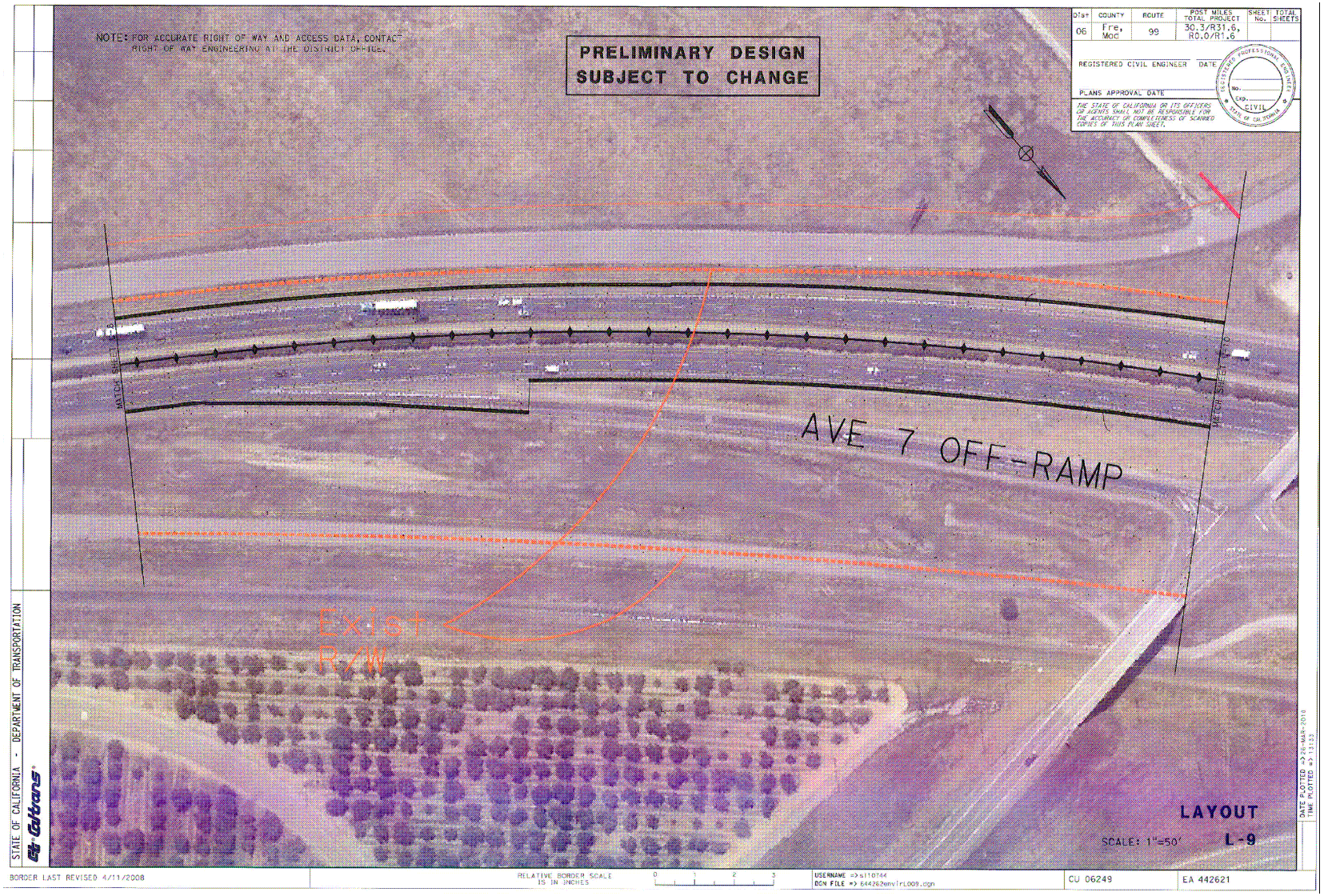
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SUBJECT TO CHANGE
Dist
COUNTY
ROUTE
POST MILES TOTAL PROJECT
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TOTAL SHEETS
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99
30.3/R31.6, R0.0/R1.6
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
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No.
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CIVIL
STATE OF CALIFORNIA
AVE 7 OFF-RAMP
Exist R/W
LAYOUT
SCALE: 1"=50'
L-9
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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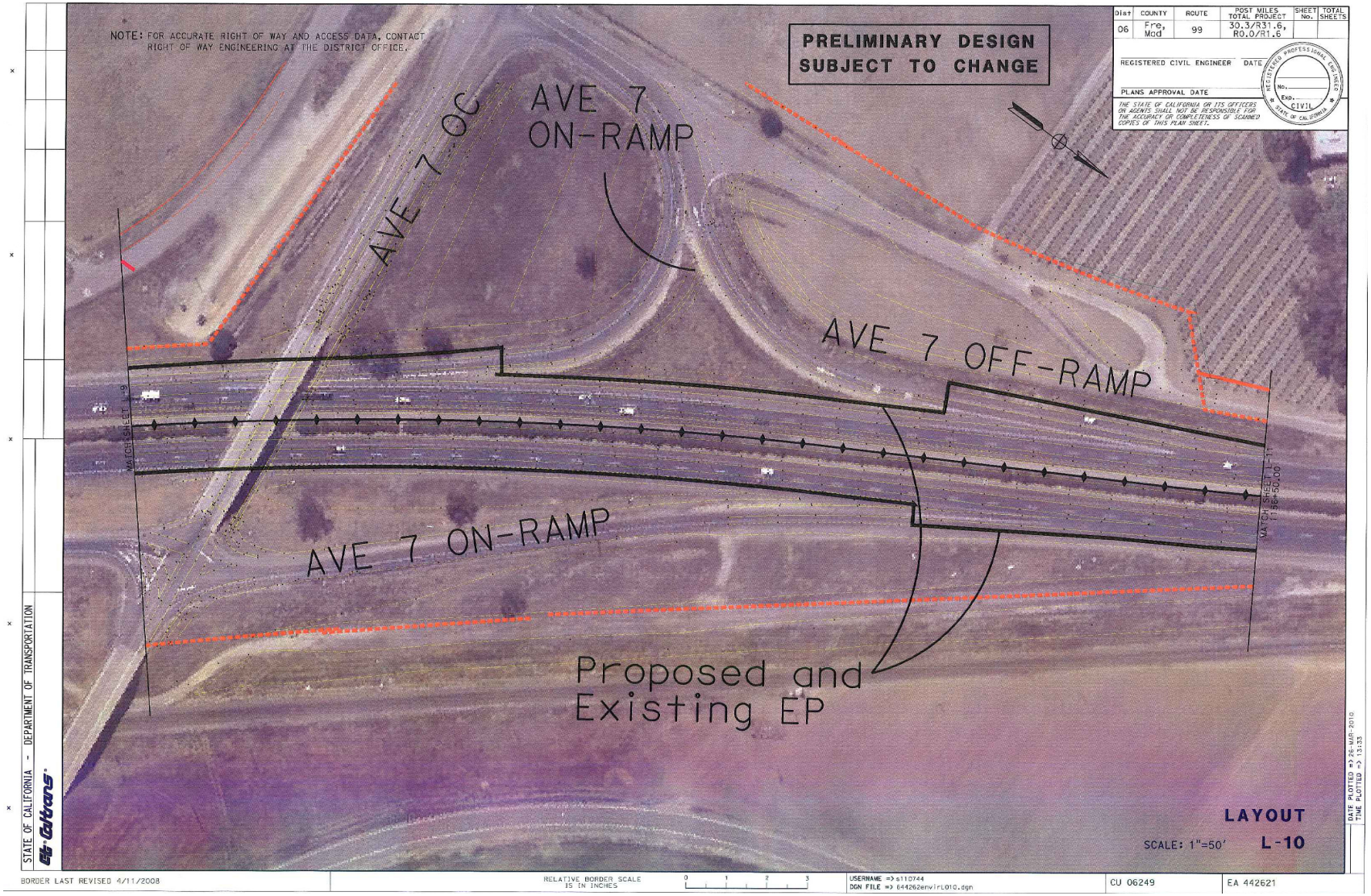
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AVE 7 OC
AVE 7 OFF-RAMP
AVE 7 ON-RAMP
Proposed and Existing EP
MATCH SHEET L-9
MATCH SHEET L-11
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L-10
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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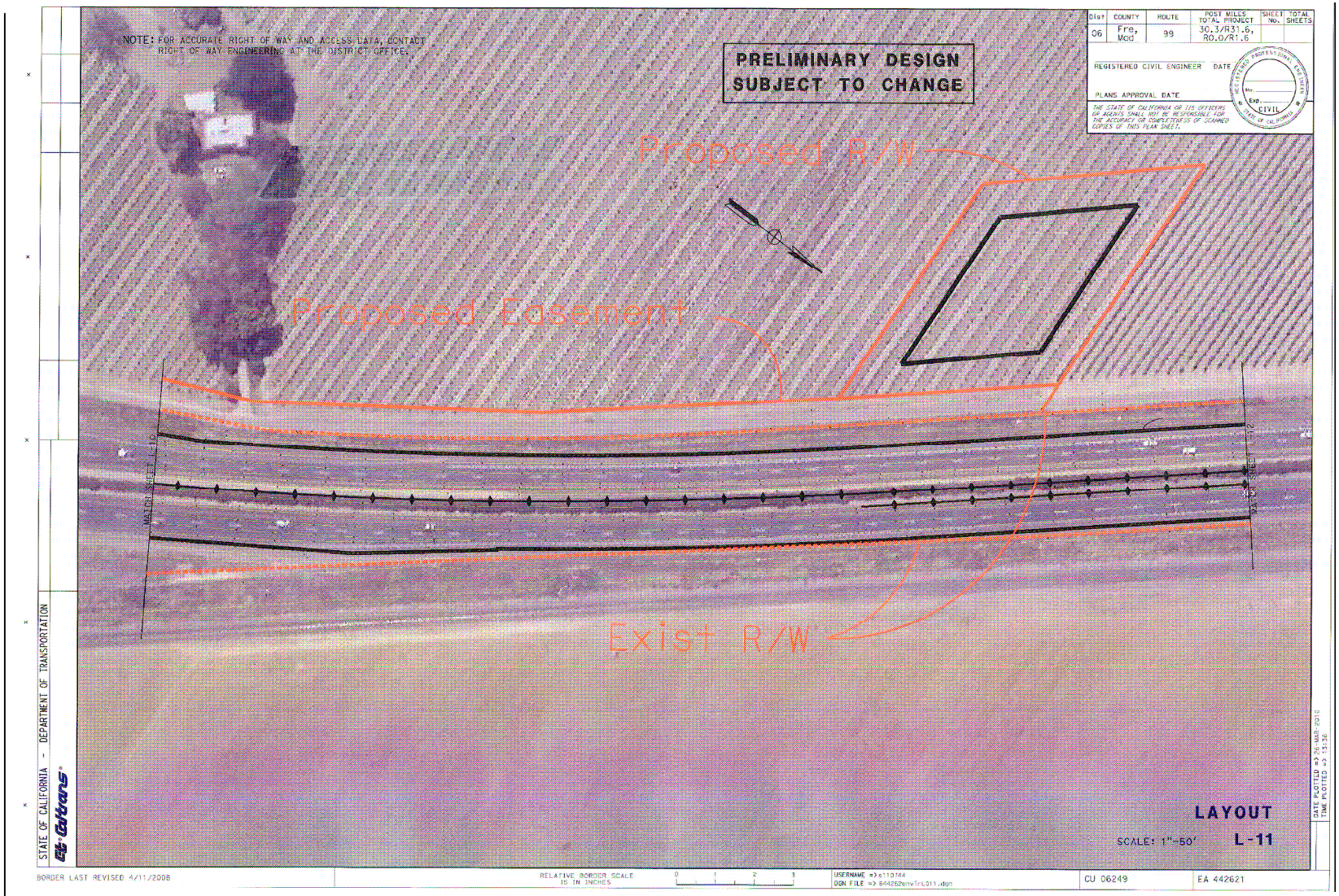
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COUNTY Fre, Mad
ROUTE 99
POST MILES TOTAL PROJECT 30.3/R31.6, R0.0/R1.6
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
Proposed R/W
Proposed Easement
Exist R/W
LAYOUT
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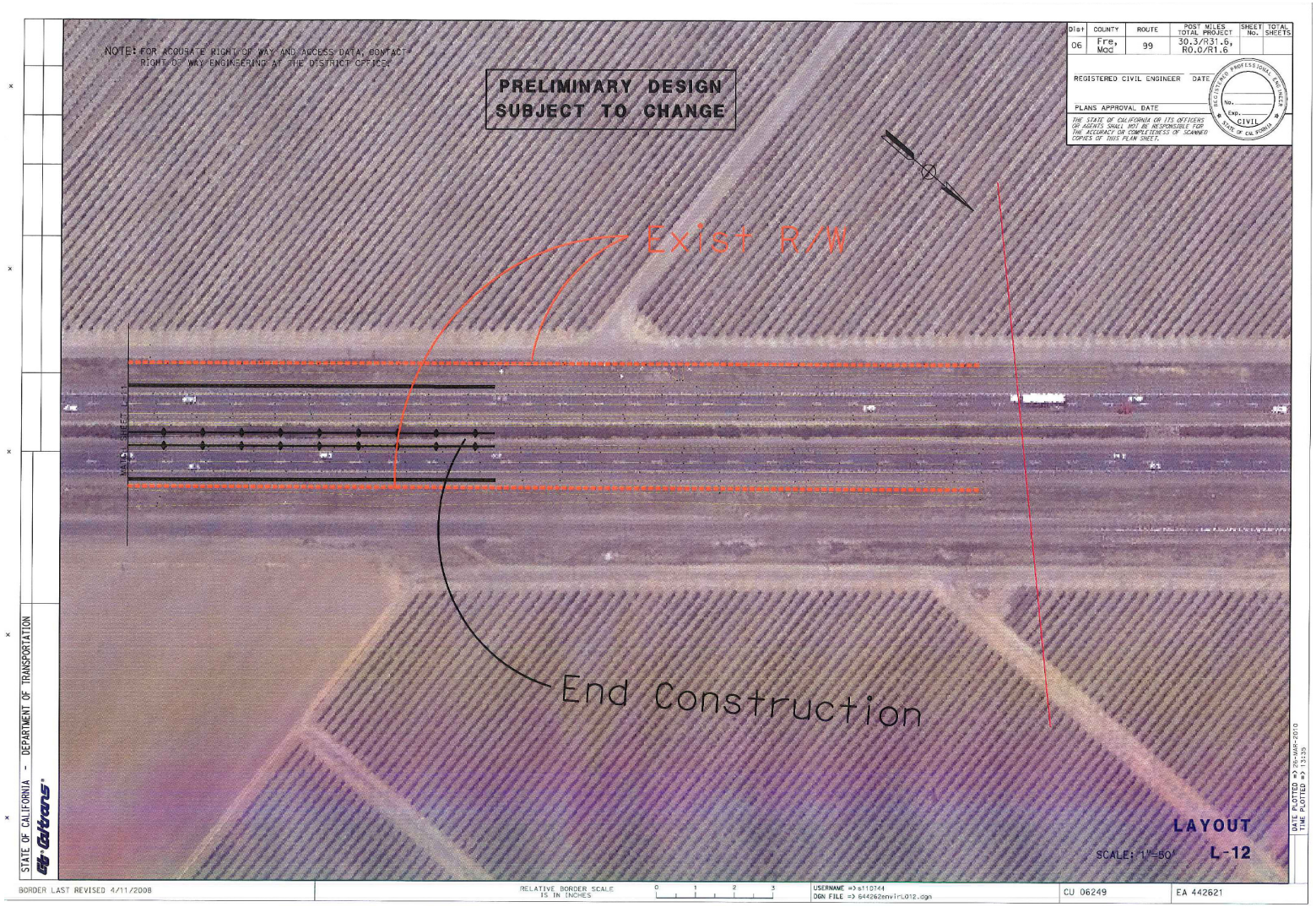
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ROUTE
POST MILES TOTAL PROJECT
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TOTAL SHEETS
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30.3/R31.6, R0.0/R1.6
REGISTERED CIVIL ENGINEER
DATE
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THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
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DEPARTMENT OF TRANSPORTATION
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(Image 15)

Appendix G USFWS Species List

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

February 23, 2009

Document Number: 090223011303

Sarah Paulson
Caltrans
2015 E Shields Ave, Suite 100
Fresno, CA 93726

Subject: Species List for Island Park Six-Lane Project

Dear: Mrs. Paulson

We are sending this official species list in response to your February 23, 2009 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be May 24, 2009.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 090223011303

Database Last Updated: January 29, 2009

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana aurora draytonii
California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Mammals

Dipodomys nitratoides exilis
Fresno kangaroo rat (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Castilleja campestris ssp. succulenta

Critical habitat, succulent (=fleshy) owl's-clover (X)
succulent (=fleshy) owl's-clover (T)

Orcuttia inaequalis
Critical habitat, San Joaquin Valley Orcutt grass (X)
San Joaquin Valley Orcutt grass (T)

Orcuttia pilosa
Critical habitat, hairy Orcutt grass (X)
hairy Orcutt grass (E)

Quads Containing Listed, Proposed or Candidate Species:

FRESNO SOUTH (358A)
KEARNEY PARK (358B)
LANES BRIDGE (379A)
GREGG (379B)
HERNDON (379C)
FRESNO NORTH (379D)
BIOLA (380D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** proje within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be

carried to their habitat by air currents.

- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by t list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environment documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of twc procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that n result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together t avoid or minimize the impact on listed species and their habitat. Such consultation would resu in a biological opinion by the Service addressing the anticipated effect of the project on listed proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and a likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct a indirect impacts to listed species and compensates for project-related loss of habitat. You shoı include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essenti to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose th for listing as threatened or endangered. By considering these species early in your plannir process you may be able to avoid the problems that could develop if one of these candida was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts More info

Wetlands

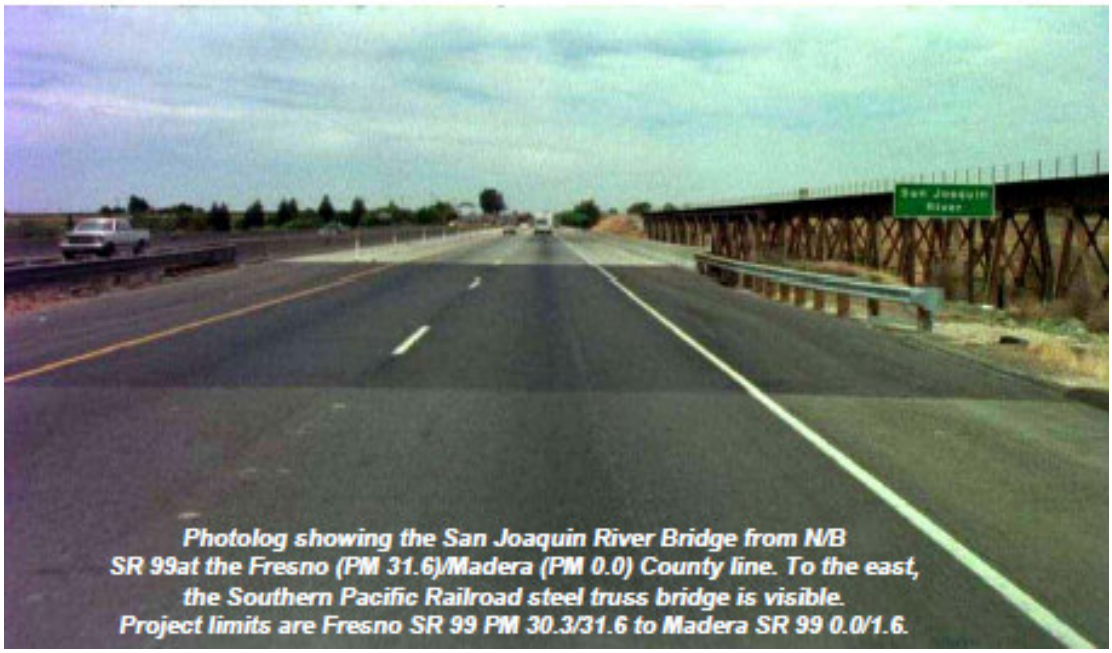
If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defir by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, yo will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

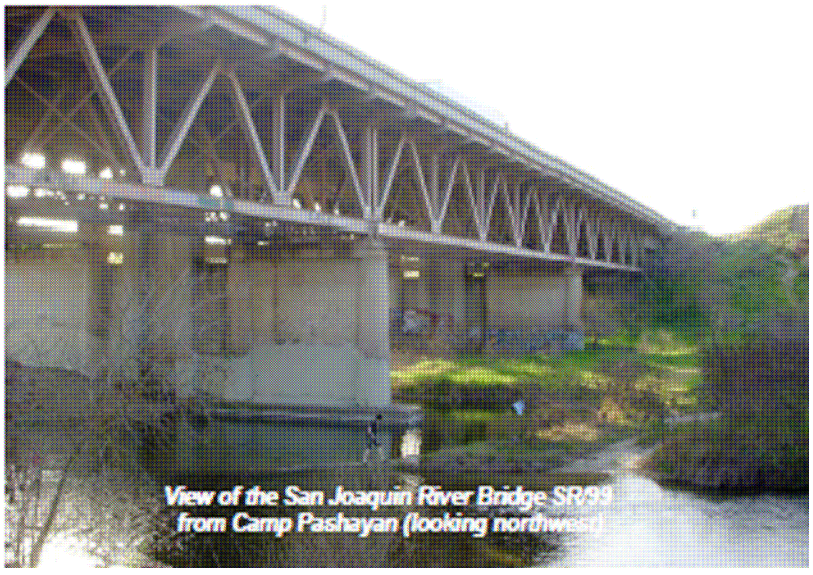
Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be May 2009.

Appendix H Viewpoint Photos

Viewpoint 1: From State Route 99 of the San Joaquin River Bridge



Viewpoint A: Of the San Joaquin River Bridge on State Route 99 (photos 1-4)



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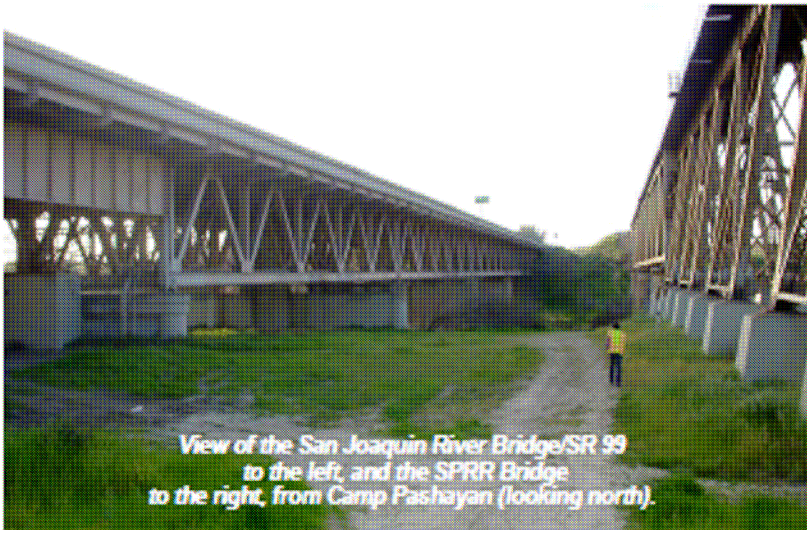

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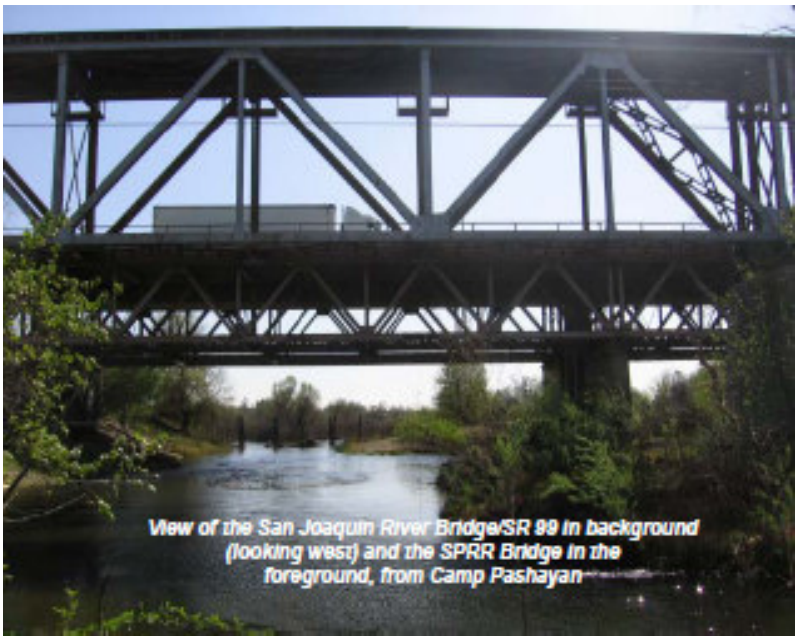


(Photo3)

(Photo 4)

Viewpoint 2 and B: From Avenue 7 interchange in Madera County

Appendix I Biological Opinion

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:
81420-2010-F-0033-1

FEB 04 2010

Mr. Zachary Parker
Biology Branch Chief
California Department of Transportation, District 6
2015 East Shields Avenue, Suite A-100
Fresno, California 93726-5428

Subject: Appendage of the Island Park Six-Lane Project in Fresno and Madera Counties, California (California Department of Transportation 06-FRE/MAD-99-PM 30.3/1.6), to the *Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office, California* (Service File Number 1-1-96-F-0156)

Dear Mr. Parker:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request for formal consultation on the proposed Island Park Six-Lane Project (project) in Fresno and Madera Counties, California. Your original letter requesting consultation, dated October 5, 2009, was received in this office on October 13, 2009. You have also requested that this proposed project be appended to the March 11, 1997, *Programmatic Biological Opinion Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office* (Programmatic) (Service file number 1-1-96-F-0156; Service 1997). At issue are the potential effects of the proposed project on the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus;* VELB). This response has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act).

The findings and recommendations in this formal consultation are based on: (1) the October 5, 2009, letter requesting formal consultation and appendage, and the accompanying project description, mapping, photo documentation, and survey data; (2) electronic mail (e-mail) exchanges and telephone conversations between Caltrans and the Service; (3) the Natural Environmental Study (NES), with supplemental information provided by Caltrans; and (4) other information available to the Service.

TAKE PRIDE IN AMERICA

Caltrans has determined that the project is likely to adversely affect the VELB, as two elderberry shrubs (*Sambucus* sp.) will be removed from the action area and transplanted. The Service concurs with this determination.

Consultation History

November 9, 2007. At a meeting between the Service and Caltrans, Zachary Parker (Caltrans) gave Rocky Montgomery (Service) a letter, dated November 8, 2007, requesting recommendations for San Joaquin kit fox (*Vulpes macrotis mutica*) surveys for the project along the State Route 99 corridor in proximity to a California Natural Diversity Database (CNDDB) occurrence.

November 28, 2007. Sarah Keys (Caltrans) e-mailed Mr. Montgomery to arrange details for a site visit planned for December 2007.

December 19, 2007. Mr. Montgomery and Sarah Keys (Caltrans) met for a field visit at the project site.

October 13, 2009. The Service received a letter from Caltrans requesting formal consultation and the appendage of the project to the VELB Programmatic. The letter included a shortened biological assessment (mini-BA) with a summary of the project description and the conservation strategy to be implemented, as well as maps, photo documentation, and survey data pertinent to the project.

October 21-22, 2009. Jen Schofield (Service) e-mailed Mr. Parker with the concern that Caltrans' letter did not provide adequate information to review and requested a more substantial document, particularly in regards to the project description and survey details. Mr. Parker suggested he could send the NES to provide further project information.

October 29, 2009. Mr. Parker e-mailed the NES to Ms. Schofield.

December 10, 2009. Ms. Schofield e-mailed Mr. Parker with several questions concerning elements of the project description dealing with bridge work, water-work, and the size of the project footprint. She also corrected inaccurate calculations for the VELB compensation relevant to the elderberry seedlings and native plants. Ms. Schofield further explained that credit sales with the French Camp Conservation Bank (FCCB) were on hold, although the bank was still accepting transplants. An in-lieu conservation fund option for the VELB would temporarily stand-in for the credit sale component of the agreement.

January 7, 2010. Virginia Strohl (Caltrans) called Ms. Schofield to discuss the latest developments with the FCCB in regards to the project as well as several other VELB projects. She relayed that Frank Meraz (Caltrans) was working with the engineers to answer Ms. Schofield's questions from December 10, 2009. One of the queries involved whether project construction would be present along less than 250 linear feet (ft) of undeveloped bank habitat (this is considered one of the

requirements for appendage to the Programmatic). Ms. Strohl stated that if the distance turned out to be much greater, Caltrans recognized that a standard consultation would be necessary.

January 14, 2010. Mr. Meraz (Caltrans) e-mailed Ms. Schofield with responses to her earlier questions from December 10, concerning bridge work, water quality control measures, project acreage, the distance of linear ft of undeveloped riparian habitat present, and compensation.

Project Description

Caltrans proposes to construct two additional lanes in the median of Sate Route (SR) 99 over a 3.2 mile (mi) segment by converting the existing four-lane freeway to a six-lane freeway. The segment begins just south of the Grantland Avenue under-crossing in Fresno County (Post Mile (PM) 30.3) and continues just north of the Avenue 7 over-crossing in Madera County (PM 1.6). Bridge work over the San Joaquin River is also involved. These proposed actions are anticipated to improve traffic operations, increase the capacity of the extended segment of SR 99, and reduce congestion in the area. Activities will include:

- Demolition of the existing San Joaquin River Bridge and replacement with a new structure.
    - Typical bridge construction will consist of driving piles, pouring footings/columns, constructing falsework and the bridge deck, and finally removal of falsework. Pending the design stage geotechnical and hydraulic recommendations, large diameter pile foundations (cast-in drill hole or cast-in-steel shell) rather than pile cap foundations may be necessary at some or all pier locations. Driven piles will be expected at the abutments.
    - Vehicular traffic will be carried on the existing bridge during stage one and on a portion of the new structure during stage two. Bridge removal operations will be required during each stage. It is anticipated that a trestle (a temporary construction bridge) will be required to span the active waterway for the purposes of construction through-access, foundation construction operations, and falsework erection/removal.
- Construction of a temporary construction easement extending a minimum of 30 feet (ft) on both sides of the bridge.
- Construction of temporary equipment access roads within the construction easement.
- Removal of trees within the temporary easement.
- Relocation of utilities
- Staging for equipment

Equipment parking, project access, supplies logistics, equipment maintenance, and other project-related activities will occur within the temporary construction easement. Designated staging areas for equipment storage, vehicle parking, and other project-related activities will be pre-approved by a Service-approved biologist. Equipment staging will likely occur in the northwest section of the project area.

The borrow site from which fill material will be obtained is currently unknown at this stage, as the contractor will be responsible for the selection and compliance of the selected site prior to construction activities.

To allow equipment to access the project site, vegetation will be removed within the footprint of the proposed bridge, and temporary access roads will be constructed. Vegetation removal for staging areas and construction work will occur between mid August and the end of February when nesting birds will not be present.

Construction of the project is not likely to begin for approximately three years, placing the project start schedule around October 2012. Construction completion is expected to occur in December 2015. Construction activities near elderberry shrubs will occur only between August 1 and March 1 to avoid the season in which the adult VELB emerges from the elderberry stems to feed and mate.

Proposed Avoidance and Minimization Measures

According to the mini-BA, the NES, and further discussion with Caltrans biologists, Caltrans also proposes to implement the following measures to minimize and avoid effects to the VELB that may occur within the action area.

1. Caltrans shall follow the Service's 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle (Guidelines).

2. Caltrans shall ensure that the project employs dust control measures such as water swiping and spraying. Areas shall be watered down as necessary to prevent dirt from becoming airborne and accumulating on elderberries in and adjacent to the action area.

3. A qualified Service-approved biologist shall conduct an environmental education program for construction employees covering the status of the VELB, how to avoid damaging the elderberry shrubs, the importance of avoiding impacts to the beetle, and the penalties for not complying with biological minimization requirements.

4. Eight of the total ten elderberry shrubs within the project area shall be avoided during construction activities. These shall be designated as ESAs and protected by a minimum buffer of 20 ft from each shrub's canopy drip-line. No construction activities shall be permitted within these 20 ft buffer zones, other than those activities necessary to erect the staking or fencing. Signs shall be posted every 50 ft along the perimeter of the buffer area fencing stating, "This area is habitat of the valley elderberry longhorn beetle, a

Table 1. Elderberry stems directly affected by the proposed project, the number of stems with anticipated additional growth, and proposed compensation.

# Shrubs	Stem Size	# of Stems	Exit Holes	Riparian Habitat	Elderberry Seedling Ratio	# Elderberry Seedlings	Associated Native Ratio	# Associated Natives
2	1"-3"	1	No	Yes	2:1	2	1:1	2
	1"-3" (anticipated additional growth)	4	No	Yes	2:1	8	1:1	8
	3"-5" (anticipated additional growth)	2	No	Yes	3:1	6	1:1	6
	>5"	1	No	No	3:1	3	1:1	3
	Total	**8**				**19**		**19**

Action Area

The action area is defined in 50 CFR § 402.02 as, "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area for the proposed project includes the 43.5 ac project footprint, incorporating all areas of project construction, as well as staging and access areas within the temporary easements; the 3.2 mi segment of existing SR 99 undergoing widening (including the undercrossing and overcrossing just south of Grantland Avenue and Avenue 7, respectively); the inside median in which the two additional lanes will be built; a portion of the San Joaquin River and riparian habitat in which bridge demolition, reconstruction, and access will occur; and a segment of the San Joaquin River, immediately downstream of the project footprint, to account for water quality effects during, and following, bridge work. The action area also includes the borrow site, from which fill material will be obtained, but which is not yet identified.

Appending to the Programmatic Biological Opinion

The Service has determined that it is appropriate to append the Island Park Six-Lane Project to the Programmatic. This letter is an agreement by the Service to append the proposed project to the Programmatic and represents the Service's biological opinion on the effects of the proposed action. Compensation for projects appended to the Programmatic involves adhering to the Service's Guidelines (Service 1999), except as approved by the Service. Compensation implemented through the Guidelines should lead to the development of protected habitat areas distributed across the landscape. It is anticipated these protected areas can then be used as

foundations for future habitat conservation plans by local communities. A copy of these Guidelines is found as an appendix to the Programmatic.

The Service is tracking losses of VELB habitat permitted under the Programmatic. The Service reevaluates the effectiveness of this Programmatic at least every six months to ensure continued implementation will not result in unacceptable effects to the VELB or the habitats upon which it depends.

In accordance with the Programmatic, projects that are appended to that biological opinion will provide compensation according to these Guidelines unless otherwise approved by the Service. The compensation identified in the Programmatic includes transplantation of affected elderberry plants to a compensation area(s), and planting of additional elderberry seedlings/cuttings and associated native species at the compensation area(s).

The proposed project will adversely affect two elderberry shrubs that are suitable habitat for VELB. These shrubs currently have two stems one inch in diameter or greater at ground level, while an additional six stems one inch in diameter or greater at ground level, are anticipated to grow over the next three years. Caltrans is providing compensatory measures for the anticipated adverse effects, which will minimize the effect of the take on the species (see Table 1). Plantings will occur on a Service-approved site that meets the requirements documented in the Service's revised October 2009 *Selected Review Criteria for Conservation Banks and Section 7 Off Site Compensation* (Review Criteria). Caltrans has proposed using the FCCB as the compensation site. If a site other than the FCCB is proposed, the Service will require additional information on the site, the protections afforded the site (see enclosed Review Criteria), and who will be responsible for the monitoring and maintenance under the Review Criteria.

Effects of the Proposed Action

Two elderberry shrubs within the action area, one located within riparian habitat and the second within non-riparian habitat, will be removed and transplanted in order to minimize project effects on VELB and their habitat. An approximate width of 224 linear ft of proposed right-of-way, as measured at the San Joaquin River's centerline, will be affected directly by construction. This segment of the River is highly degraded, lacks natural flow levels, and was historically the site of an asphalt plant. Efforts will be made to minimize disturbance to riparian vegetation in this locale, however, the entire area will be temporarily affected. After the relocation of the single riparian-based elderberry underneath the existing bridge, there will be no remaining elderberries within the immediate riparian habitat.

Both the riparian and non-riparian elderberry shrubs are potential VELB habitat and will be transplanted in order to minimize their loss as a result of highway widening activities. These two shrubs currently contain a total of two stems; one with a diameter greater than 5 inches at ground level, and one stem with a diameter between 1 and 3 inches at ground level (Table 1). In order to anticipate future stem growth prior to construction, Caltrans proposes to incorporate the need to permanently remove and transplant an additional six stems, with the potential to contain the VELB. Specifically, Caltrans anticipates four stems with a diameter between 1 and 3 inches at

ground level and two stems with a diameter between 3 and 5 inches at ground level. Caltrans will minimize the potential for losing all VELB within the two elderberry shrubs by transplanting them to the FCCB during the shrubs' dormant period, between November 1 and February 15. Transplanting during this window also minimizes disturbance and stress to the shrubs. However, since effects to the VELB may occur as a result of transplanting itself, Caltrans will further compensate for the impacts to the VELB by planting 19 elderberry seedlings and 19 associated native plants at the FCCB in accordance with the Guidelines (Service, 1999) (see Table 1).

Eight additional elderberry shrubs occur within the action area, but will be avoided during construction activities, as they are located at a distance greater than 100 ft away from project activities. These shrubs will not be transplanted. Effects to the VELB may occur if elderberry shrubs are disturbed during project construction. However, implementation of dust-control measures, personnel education, ESA buffers, and orange mesh fencing, will reduce any effects from construction activities within the vicinity of the eight elderberry shrubs to insignificant. Construction activities near the shrubs will occur only between August 1 and March 1 to avoid the season when the adult beetles emerge. There will be no soil disturbance adjacent to the roots of any of these eight buffered elderberry shrubs. No vegetation removal will occur adjacent to these shrubs and will only take place elsewhere between mid August and the end of February.

Conclusion

Based on the current status of the VELB, the environmental baseline, and cumulative effects as analyzed in the Programmatic, in addition to the project-specific effects of the proposed Island Park Six-Lane project, it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of the VELB.

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

Amount or Extent of Take

The Service has determined that implementation of the proposed project will result in the incidental take of all VELB inhabiting two elderberry shrubs containing two stems measuring one inch or greater in diameter at ground level, plus an additional six stems measuring one inch or greater in diameter at ground level, anticipated to grow over the next three years prior to the commencement of project construction. The incidental take is anticipated to take the form of death, injury, harassment, or harm as a result of habitat loss due to the addition of two new highway lanes and bridge demolition and reconstruction, leading to the necessity for shrub removal.

Effect of the Take

As the effects of this project fall within the parameters established within the Programmatic, the Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle. The proposed conservation measures will minimize the effect of the take on the species.

RE-INITIATION--CONCLUSION

This concludes the Service's review of the proposed Island Park Six-Lane Project outlined in your request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions pertaining to this letter regarding the Island Park Six-Lane Project, please contact either Jen Schofield or Susan P. Jones at (916) 414-6600.

Sincerely,

for Susan K. Moore
Field Supervisor

Enclosures:
Revised October 2009 *Selected Review Criteria for Conservation Banks and Section 7 Off-Site Compensation*

cc:
Mr. Walter C. Waidelich, Jr., Division Administrator, Federal Highway Administration, Sacramento, California
Ms. Julie Vance, California Department of Fish and Game, Fresno, California

Sacramento Fish and Wildlife Office
Selected Review Criteria for Section 7 Off-Site Compensation
Revised Oct. 2009

Property Assurances and Conservation Easement

- ☐ Title Report (preliminary at proposal, and Final Title Insurance at recordation), shall be no older than six months;
- ☐ Property Assessment and Warranty;
- ☐ Subordination Agreement **[if there is any outstanding debt on the property]**;
- ☐ Legal Description and Parcel Map;
- ☐ Conservation Easement (should use the current multi-agency standardized CE template document); or
- ☐ Non-Template Conservation Easement;

Site Assessment and Development

- ☐ Phase I Environmental Site Assessment;
- ☐ Restoration or Development Plan;
- ☐ Construction Security ***[if applicable]***;
- ☐ Performance Security;

Site Management

- ☐ Interim Management Plan;
- ☐ Interim Management Security Analysis and Schedule;
- ☐ Long-Term Management Plan;
- ☐ Endowment Fund Analysis and Schedule;

**Guidelines to assist in understanding what is required are detailed on pages 2–7.

Guidelines

Property Assurances and Conservation Easement (CE)

Title Report

1. Who holds fee title to property? Should be the Project Applicant. If not, there may be liability and contracting issues.
2. Are there any liens or encumbrances (existing debts or easements) on the property?
    a. Review necessary supporting instruments to evaluate liens and encumbrances. Property owner should submit a "*Property Assessment and Warranty*," which discusses each and every exception listed on the Preliminary and Final Title Insurance Policies, evaluating any potential impacts to the conservation value that could result from the exceptions (see below).
    b. The *Property Assessment and Warranty* template is available at http://www.fws.gov/sacramento/es/cons_bank.htm, and should include a summary and full explanation of all exceptions remaining on the title, with a statement that the owner/Grantor accepts responsibility for all lands being placed under the CE as available for the primary purposes of the easement, as stated in the easement, and assures that these lands have a free and clear title and are available to be placed under the CE.
3. Could any of these liens or encumbrances potentially interfere with either biological habitat values or ownership? If existing easements can potentially interfere with the conservation values/habitat of the property, those portions of the land should be deducted from the total compensation acreage (or number of credits) available on the site.
4. A *Subordination Agreement* is necessary if there is any outstanding debt on the property. Review *Subordination Agreement* for adequacy—the lending bank or other lien holder must agree to fully subordinate each lien or encumbrance.

Legal Description and Parcel Map

1. Ensure accuracy of map, and location and acreage protected under the CE.
2. Both the map and the legal description should explain the boundaries of the individual project compensation site. The site should *not* have 'leftover' areas for later use.

Conservation Easement from Template

1. The current CE template can be found at http://www.fws.gov/sacramento/es/cons_bank.htm.
2. Who will hold the easement?
    a. Must have third-party oversight by a qualified non-profit or government agency. Qualifications include:
        i. Organized under IRC 501(c)(3);

ii. Qualified under CA Civil Code § 815;
iii. Bylaws, Articles of Incorporation, and biographies of Board of Directors on file at, and approved, by USFWS.
1. Must meet requirements of USFWS, including 51% disinterested parties on the Board of Directors;

b. Must have satisfactorily completed the CDFG due diligence process for easement/endowment holders and/or be accredited by the Land Trust Accreditation Commission http://www.landtrustaccreditation.org/home.

3. If not using the multi-agency template, applicant should specify objections they have to the template as provided, and may substantially delay processing as they will require Solicitor review. Alternate CEs must be approved by the USFWS prior to recording.

Non-Template Conservation Easements

1. You must either 1) add USFWS as a third-party beneficiary, or 2) add language throughout the document, in all appropriate places, that will assure USFWS the right to enforce, inspect, and approve any and all uses and/or changes under the CE prior to occurrence (including land use, biological management or ownership).
2. Include, at a minimum, language to:
   a. Reserve all mineral, air, and water rights under the CE as necessary to maintain and operate the site in perpetuity;
   b. Ensure all future development rights are forfeited;
   c. Ensure all prohibited uses contained in the multi-agency conservation agreement template are addressed; and
   d. Link the CE, Management Plan, and the Endowment Trust Fund within the document (e.g., note that each exists to support the others, and where each of the documents can be located if a copy is required).
3. Insert necessary language, particularly, but not exclusively, per: (can compare to multi-agency CE template)
   a. Rights of Grantee
   b. Grantee's Duties
   c. Reserved Rights
   d. Enforcement
   e. Remedies
   f. Access
   g. Costs and Liabilities
   h. Assignment and Transfer
   i. Merger
   j. Notices

Site Assessment and Development

Phase I Environmental Site Assessment

1. The Assessment must show that the compensation site is not subject to any recognized environmental conditions as defined by the American Society for Testing and Materials (ASTM) Standard E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, available at http://www.astm.org/Standards/E1527.htm, (i.e., the presence or likely presence of any Hazardous Substances or petroleum products).
2. If the Phase I Environmental Site Assessment identifies any recognized environmental conditions, the Project Applicant must represent and warrant to the USFWS that all appropriate assessment, clean-up, remedial, or removal action has been completed.

Development Plan *[not required if doing preservation only]*

1. The overall plan governing construction and habitat establishment activities required to be conducted on the Property, including, without limitation, creation, restoration, and enhancement of habitat.
   a. This plan should include the baseline conditions of the Property including biological resources, geographic location and features, topography, hydrology, vegetation, past, present, and adjacent land uses, verified *Waters of the U.S. Jurisdictional Determination,* if applicable, species and habitats occurring on the property, a description of the activities and methodologies for creating, restoring, or enhancing habitat types, a map of the approved modifications, overall habitat establishment goals, objectives and Performance Standards, monitoring methodologies required to evaluate and meet the Performance Standards, an approved schedule for reporting monitoring results, a discussion of possible remedial actions, and any other information deemed necessary by the USFWS.
2. Any permits and other authorizations needed to construct and maintain the site shall be included and in place prior to the start of construction of the habitat.
3. Full construction plans for any habitat construction must be *USFWS-approved prior* to the start of construction of the habitat.

Construction Security

a. The Project Applicant shall furnish a Construction Security in the amount of 100% of a reasonable third party estimate or contract to create, restore, or enhance habitats on the property in accordance with the Development Plan.
b. The Construction Security shall be in the form of an irrevocable standby letter of credit, or a cashier's check.
   i. The letter of credit, if chosen, shall be issued for a period of at least one year, and shall provide that the expiration date will be

automatically extended for at least one year on each successive expiration date unless, until extension is no longer necessary.

Performance Security

c. The Project Applicant shall furnish a Performance Security in the amount of 20% of the Construction Security.
d. The Performance Security shall be in the form of an irrevocable standby letter of credit, or a cashier's check.
    i. The letter of credit, if chosen, shall be issued for a period of at least one year, and shall provide that the expiration date will be automatically extended for at least one year on each successive expiration date unless, until extension is no longer necessary.

4. The Construction and Performance Securities must:
    a. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
    b. Be held according to minimum standards for assuring maximum success in earning potential, and will include assurances for no loss of principle, and
    c. Disbursements or releases from each of the funds must be for documented expenditures, as they occur.

Site Management

Interim Management Plan

1. The Interim Management Plan should identify the short-term management, monitoring, and reporting activities to be conducted from the time construction ends until the Endowment Fund has been fully funded for one year and all the Performance Standards in the Development Plan have been met.

Interim Management Security Analysis and Schedule

a. The Project Applicant shall furnish an Interim Management Security (in the form of a standby letter of credit) in the amount equal to the estimated cost to implement the Interim Management Plan during the first year of the Interim Management Period, as set for in the Interim Management Security Analysis and Schedule
b. The Interim Management Security Analysis and Schedule shall consist of a table and/or spreadsheet that shows all of the tasks (management, monitoring, reporting), task descriptions, labor (hours), cost per unit, cost frequency, timing or scheduling of the tasks, the total annual funding necessary for each task, and any associated assumptions for each task required by the Interim Management Plan. The total annual expenses should include administration and contingency costs.
c. The Interim Management Security must:

i. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
ii. Be held according to minimum standards for assuring maximum success in earning potential, and will assurances for no loss of principle.
iii. Disbursements or releases from the fund must be for documented expenditures, as they occur.

Long-Term Management Plan (LTMP)

1. The LTMP template can be found at http://www.fws.gov/sacramento/es/cons_bank.htm and identifies the long-term management, monitoring and reporting activities to be conducted after the interim Management Period.
2. The LTMP should include at minimum:
   a. Purpose of the Project and purpose of the LTMP;
   b. A baseline description of the setting, location, history, and types of land use activities, geology, soils, climate, hydrology, habitats present (once project meets Performance Standards), and species descriptions;
   c. Overall management, maintenance and monitoring goals; specific tasks and timing of implementation; and discussion of any constraints, which may affect goals;
   d. The Endowment Fund Analysis and Schedule (see below),
   e. Discussion of Adaptive Management actions for reasonably foreseeable events and possible thresholds for evaluating and implementing Adaptive Management;
   f. Rights of access to the Property and prohibited uses of the Property as provided in the CE; and
   g. Procedures for Property transfer, land manager replacement, amendments, and notices.
3. A copy of the LTMP must be either recorded with the CE, or the CE must state in its body that the current management plan can be obtained upon request from the USFWS, if not using the CE template.

Endowment Fund Analysis and Schedule

a. Can use a PAR or PAR-like analysis that must be based upon the final, approved LTMP.
b. The analysis and schedule shall consist of a table and/or spreadsheet that shows all of the tasks (management, monitoring, reporting), task descriptions, labor (hours), cost per unit, cost frequency, timing or scheduling of the tasks, the total annual funding necessary for each task, and any associated assumptions for each task required by the Interim Management Plan. The total annual expenses should include administration and contingency costs.
c. The Endowment Fund must:

i. Be held by a qualified, Service-approved, non-profit organization or government agency [see requirements under CE above], and
ii. Be held according to minimum standards for assuring maximum success in earning potential, and will include assurances for no loss of principle.
iii. Disbursements or releases from the fund must be for documented expenditures, as they occur.

Appendix J Comments and Responses

This appendix contains all the comments received during the public review period for the draft environmental document (from June 10, 2009 to July 10, 2009). Written comments were submitted as e-mails, letters, and comment cards. A court reporter transcribed oral comments submitted during the public hearing on June 24, 2009.

Responses to the comments follow each comment letter, e-mail, or comment card. Responses to comments contained in the court reporter's transcripts follow the transcript document. Caltrans received 28 comments during the comment period.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

July 14, 2009

G. William "Trais" Norris, III
California Department of Transportation, District 6
2015 E. Shields Avenue, Suite 100
Fresno, CA 93726-5428

Subject: Island Park Six-Lane
SCH#: 2009061047

Dear G. William "Trais" Norris, III:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 13, 2009, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Response to Comment: State Clearinghouse

Thank you for your comments and acknowledging our compliance with CEQA requirements per the State Clearinghouse guidelines. Caltrans has recorded the corresponding state clearinghouse number for this project.

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

July 14, 2009

G. William Norris III
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, CA 93726

Dear Mr. Norris:

Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment
Island Park-Six-Lane Project

Staff for the Department of Water Resources has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board (Formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);

- A vegetation plan including, but not limited to the sites, vegetation type (i.e. common and scientific name), number, planting spacing and irrigation method that will be within each project area (CCR Section 131).

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and state agencies, as other permits may apply.

If you have any questions please contact me at (916) 574-0651 or by email jherota@water.ca.gov.

G. William Norris III
July 14, 2009
Page 2 of 2

Sincerely,

James Herota
Staff Environmental Scientist
Floodway Protection Section
Division of Flood Management

cc:

Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Response to Comment: **Central Valley Flood Protection Board**

Thank you for your comments. Caltrans would apply for any appropriate Central Valley Flood Protection Board encroachment permit(s) prior to construction of this project. Caltrans will continue to coordinate with the CVFPB.

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

July 12, 2009

Trais Norris III
Caltrans, District 6
2015 E. Shields Avenue, Suite 100
Fresno, CA 93726

Re: Notice of Completion, Mitigated Negative Declaration (MND)
Island Park Six-Lane Project
SCH# 2009061047

Dear Mr. Norris:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers. 1

The at-grade rail crossing at Herndon Avenue (CPUC #001B-195.80) is within one fourth of a mile from the SR 99/Herndon Avenue interchange. The Herndon Avenue rail crossing needs to be analyzed in the traffic and transportation section of the document based on the proposed capacity enhancing project (one additional lane in each direction) to the SR 99 mainline. There is no reference or analysis to traffic exiting or entering the ramps at this Interchange within the proposed MND. The proposed project will exacerbate the existing queuing at the at-grade rail crossing and needs to address the level of significance in accordance with CEQA and provide mitigation measures as appropriate based on project and cumulative impacts. 2

The Commission recommends that Caltrans include consideration of potential project-related rail safety impacts, and measures to reduce adverse impacts to at-grade rail crossings in the appropriate environmental document (MND or EIR). 3

In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. General categories of measures to reduce potential adverse impacts on rail safety include: 3

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses

- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

4

Commission approval is required to modify existing highway-rail crossings or to construct new crossings, the CPUC will be a responsible party under CEQA and the impacts of the crossings must be discussed in the appropriate environmental document.

Thank you for your consideration of these comments. If you have any questions in this matter, please contact me at (415) 713-0092 or email at ms2@cpuc.ca.gov.

Sincerely,

Moses Stites
Rail Corridor Safety specialist
Consumer Protection and Safety Division
Rail Transit and Crossings Branch
515 L Street, Suite 1119
Sacramento, CA 95814

Response to Comment: Public Utilities Commission

1. The Island Park Six Lane Project would allow more vehicles to utilize State Route 99 as compared to the No-Build Alternative. The traffic analysis indicates that the additional lanes do not induce travel, instead this would result in fewer vehicles using the local arterial and collector streets. The No-Build Alternative would result in greater congestion on the freeway and the local roads, as drivers seek alternative routes off the State Highway System. The City of Fresno General Plan and Master Environmental Impact Report (2002) analyzed the surface streets within the jurisdiction of the City of Fresno. At that time the Caltrans State Route 99 Concept Report identified the future width of State Route 99 to be a six-lane facility.

2. This project will widen in the median, with exception to the San Joaquin River Bridge, throughout the project limits. No work will be done to ramps during the construction of this project. The queuing at the at-grade Herndon Avenue (CPUC #001B-195.80) rail crossing was not within the project limits and was not analyzed. Generally, increasing the capacity of State Route 99 to six-lanes will have a minimal local traffic circulation impact when compared to land use decisions and subsequent development impacts to Herndon Avenue traffic. Mitigation of local traffic circulation impacts due to current and future land use decisions are addressed through the City of Fresno's Traffic Signal Mitigation Impact Fee Program. As part of the City of Fresno's on-going effort to improve local traffic circulation, the City of Fresno has awarded a construction contract to improve capacity of the Herndon Avenue and Golden State Boulevard intersection (see Chapter 2, Section 2.1.1, updated Table 2.2 in this document).

3. The "General Categories of Measures to Reduce Potential Impacts to Rail Safety" listed in the comment are germane to at-grade intersections, not access controlled mainlines, such as we are proposing for this project. The purpose of the Island Park Project is to alleviate traffic congestion, improve traffic flow, and improve safety of this section of State Route 99. State Route 99 is a national truck route and this project will complete the widening of State Route 99 to at least six lanes in Fresno County. There is no potential for impacting at-grade rail crossings because Caltrans proposes no work off the mainline for this project. The widening of State Route 99 would not impact ramps or surface streets (outside of necessary construction detours) unless there is an associated land use attractor/generator on the surface street to draw the vehicle off the mainline.

4. No work would be done to the existing at-grade rail crossing, and no new crossings would be constructed in this project.

KINDER MORGAN
ENERGY PARTNERS, L.P.
SFPP, L.P.

SFPP, L.P.
Operating Partnership

July 13, 2009

ENG 4-2-1(153.4 to 156.5 – 60)
File Reference #09-604-1

Mr. G. William "Trais" Norris III
Senior Environmental Planner
California Department of Transportation
Suite 100
2015 East Shields Avenue
Fresno, CA 93726

Re: Notice to Widen 2.9 Mile Segment of Route 99 – Construct Two Additional lanes in the Median South of Grantland Avenue Undercrossing in Fresno County to North of Avenue 7 in Madera County

Dear Mr. Norris:

This is in reply to your notice concerning the referenced project in Fresno and Madera County, California.

1 Enclosed is a copy of drawing Line Section 60, sheets 36 through 38, that depict the general alignment of Kinder Morgan's (KM) active 12-inch high pressure refined petroleum products pipeline. This facility is located within an easement on Union Pacific Railroad right of way that lies adjacent to and Northerly of SR 99.

2 Although it does not appear that KM's pipeline will be affected by the median work, in the interest of public safety and for pipeline protection, please notify Kinder Morgan Area Manager, Mr. Mike McWhorter (559) 493-2975 at least two weeks prior to commencement of work.

3 Please advise any plan changes that will impact KM's easement so that we can advise provisions for pipeline protection.

4 No construction equipment is allowed to be operated over the pipeline easement unless authorized in writing.

To avoid delays in response to future correspondence, please refer to File Reference number 09-604.

Sincerely,

D. R. Quinn
Manager – Pipeline Engineering

T: Quinn/letters/ENG4-2-1/09-604-1/MAB

Enclosures

cc: M. G. McWhorter with enclosures inc. plans
M.A. Barnum

Response to Comment: Kinder Morgan

1. Thank you for your comments. Caltrans will continue to coordinate with Kinder Morgan during design and construction of this project.

2. Caltrans would notify Kinder Morgan Area Manager prior to construction.

3. Caltrans would notify Kinder Morgan if an impact to their easement is anticipated.

4. Caltrans has recorded the File Reference number provided by Kinder Morgan for this project for all future correspondence.

NATURAL RESOURCES AGENCY — ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

TO: trais_norris@dot.ca.gov
G. William "Trais" Norris III, Senior Environmental Planner
Sierra Pacific Environmental Analysis Office, Unit 189
Department of Transportation

FROM: Dan Otis, Program Manager DO
Williamson Act Program
Division of Land Resource Protection
Department of Conservation

DATE: July 9, 2009

SUBJECT: Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment, Island Park-Six-Lane Project, Star Route 99, Fresno/Madera

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Initial Study (IS) for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. We offer the following comments with respect to the project's potential impacts on agricultural land and resources.

Project Description

1 Caltrans proposes to widen a 2.9-mile segment of State Route 99 by constructing two additional lanes in the median to convert the existing four-lane freeway to a six-lane freeway, south of the Grantland Avenue undercrossing in Fresno County, and to the north of the Avenue 7 overcrossing in Madera County. The work also includes widening and/or replacement of one bridge within the project limits. New right-of-way is anticipated west of the existing highway between Grantland and Avenue 7. Three detention basins are proposed to be constructed on the west side of the highway: two basins would be adjacent to the San Joaquin River and one basin would be located just north of the Avenue 7 crossing. The existing basin located on the east side of the highway south of Avenue 7 overcrossing would be deepened.

Mitigation Measures

2 The loss of agricultural land represents a permanent reduction in the State's agricultural land resources and a significant impact under CEQA. The Environmental Impact Report (EIR) should address mitigation measures that promote growth planning to

3 discourage "leap-frog" development, and ensure that impacts to agricultural resources do not occur prematurely. As a mitigation measure, the Department suggests that the

local jurisdiction consider mitigating significant impacts due to the conversion of possibly prime agricultural land and the cumulative loss of farmland. Where applicable, prior to issuance of grading or building permit, applicants may be required to complete one or more of the following measures at a ratio of 1:1 for prime farmland or farmland of statewide importance, as defined by the Department:

1) funding and purchase of an agricultural conservation easement;
2) purchase of credits from an established farmland mitigation bank;
3) contribution of land or funding to an organization that provides for the preservation of farmland in California;
4) completion of a new Williamson Act or Farmland Security Zone contract;
5) participation in any agricultural land mitigation program adopted by a local jurisdiction that provides equal or more effective mitigation than those listed above. Qualifying land can be within the local jurisdiction or outside the local jurisdiction for the same or equivalent crops.

4

The Department encourages the use of permanent agricultural conservation easements as mitigation for agricultural land conversion. We recommend that the quality of mitigation farmland be equivalent to that of the land converted (e.g., prime for prime).

5

The Department also has available a listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. This compilation report may be requested from the Division at (916) 324-0850, or by writing to the Division of Land Resource Protection at the address indicated below. General information about agricultural conservation easements, the Williamson Act, and provisions noted above is available on the Department's website, or by contacting the Division. The Division's website address is:

6

http://www.conservation.ca.gov/dlrp/index.htm

Williamson Act Lands

If lands under Williamson Act contract exist in the project area, the Department recommends that the EIR address the potential impacts of the project on adjacent contracted parcels.

7

Also, any public agency (as defined by Gov. Code §51291, subd. (a)) considering locating a public improvement on land within an agricultural preserve is required to notify the Director of the Department of Conservation, and the local government agency administering the preserve, of its intentions (Government Code §51291, subd.(b)). A summary of information required to be provided to the Department when a public improvement is contemplated on land within an agricultural preserve is attached. Notice to the Department should be sent to the following address:

Bridgett Luther, Director
Department of Conservation
c/o Division of Land Resource Protection
801 K Street, MS 18-01
Sacramento, CA 95814

G. William "Trais" Norris III, Senior Environmental Planner
July 9, 2009
Page 3 of 3

Thank you for giving us the opportunity to comment on this IS. If you have questions regarding our comments, or require technical assistance or information on agricultural land conservation, please contact Jacquelyn Ramsey, Environmental Planner, at (916) 323-2379.

Attachment

cc: State Clearinghouse

The Honorable Robert C. Werner
Fresno County Assessor
Hall of Records - Room 201
2281 Tulare St., Fresno, CA 93721

Fresno County Board of Supervisors
2281 Tulare Street, #301
Hall of Records
Fresno, CA 93721-2198

The Honorable Thomas P. Kidwell
Madera County Assessor
200 W. 4th Street
Madera, CA 93637

Madera County Board of Supervisors
200 West 4th Street
Madera, California 93637

Response to Comment: **Department of Conservation**

1. Caltrans has replaced the previously proposed infiltration basins adjacent to the San Joaquin River with biofiltration swales as stormwater treatment measures. This design change will reduce the impact to farmland as a result of a decreased footprint and acquisition of acreage.

2. The Farmland Conversion Impact Rating system used by the Natural Resources Conservation Service was completed to evaluate farmland impacts. This rating system is adopted by the Federal Highway Administration and is the functional equivalent of the Land Evaluation and Site Assessment model. Use of the Land Evaluation and Site Assessment model is only a recommendation under the California Environmental Quality Act; it is not required for land evaluation and site assessment. The U.S. Department of Agriculture Farmland Conversion Impact Rating Form 1006 was completed and submitted to the respective Natural Resource Conservation Service offices in Fresno and Madera County for this project (refer to Appendix D in this document).

3. An Initial Study with a Proposed Mitigated Negative Declaration/Environmental Assessment was completed for this project. This project would not increase growth in population, transportation capacity or change accessibility in excess of what is

projected in the City of Fresno, and Fresno and Madera counties' general plans or in forecasts made by regional planning agencies. This project would widen in the median and span the San Joaquin River. This project would have a potential to impact farmland, cultural resources, and biological resources in this segment of State Route 99. However, any new development would require a change from the jurisdictional counties and would have to be compatible with the general plans. This project is in response to traffic conditions and traffic forecasts based on local plans and growth projections. It is not anticipated to encourage unplanned growth from unplanned development, but to accommodate current planned land use in the counties of Fresno and Madera. See Chapter 2, Section 2.1.2 in this document for the first-cut screening analysis completed for the discussion of potential project-related growth.

4,5 & 6. Caltrans conducted a Farmland Impact Rating in conjunction with the Fresno and Madera Natural Resources Conservation Service centers for impact ratings to Prime & Unique Farmland and Statewide/Local Farmland of Importance. With the new biofiltration swale design, a total of 9.14 acres of farmland would be converted for the construction of this project. The previous design (which included the two basins) proposed to convert 15 acres of farmland. The Fresno Natural Resources Conservation Service determined a rating of 24 points, and the Madera Natural Resources Conservation Service determined a rating of 67 points. The federal Farmland Conversion Impact Rating score is below 160 points, therefore farmland impacts are not substantial and the total impact rating is under the threshold that requires mitigation measures. It can be deduced that with the new biofiltration swale design, the impact rating scores would be the same or lower than what was previously determined. See Chapter 2, Section 2.1.3 in this document for discussion of the farmland impacts.

7. No Williamson Act Land contracts would be affected by the construction of this project.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

July 08, 2009

G. William "Trais" Norris III
Sierra Pacific Environmental Analysis Branch
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, CA 93726-5428

Project: Island Park – Island Park Six-Lane Project
District Reference No: 20090409

Dear Mr. Norris:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment (document) for the project that consists of widening a 2.9-mile segment of State Route 99 from a four-lane freeway to a six-lane freeway and replacing a bridge south of Grantland Undercrossing in Fresno County to north of Avenue 7 Overcrossing in Madera County and construction of detention basins. The District offers the following comments:

1

1. The document does not include the quantification of project related emissions. To validate the conclusion that the project will have no impact on air quality, the District recommends the document be amended to include an air impact assessment (AIA) identifying and quantifying the project's construction-related emissions, including fugitive dust, off-road construction equipment exhaust, and on-road vehicle emissions.

2

2. District Rule 9510 (Indirect Source Review) Section 2.2 states that transportation projects whose construction exhaust emissions would equal or exceed 2.0 tons of NOx or 2.0 tons of PM10 would be subject to the rule. Based on the information provided in the document, project related construction emissions would exceed 2.0 tons per year. The District recommends that the project proponent quantify project related construction exhaust emissions. If the analysis indicates that project emissions do exceed the 2.0 ton threshold, the project would be subject to the rule.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
www.valleyair.org

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

3. District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees. Any applicant subject to District Rule 9510 is required to submit an air impact assessment (AIA) application to the District no later than seeking final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. If approval of the subject project constitutes the last discretionary approval by your agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees, be made a condition of the project's approval. 3

4. In addition to being subject to District Regulation VIII (Fugitive PM10 Prohibitions, the proposed project may also be subject to the following District rules: Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm. 4

5. Page 60 of the document states that Madera and Fresno Counties are considered in non-attainment with respect to the Federal standards for particulate matter. The San Joaquin Valley is in attainment with the PM10 Federal standard and therefore the District recommends that the document be changed to reflect that attainment status. 5

6. If the project is located near residential/ sensitive receptors, the proposed project should be evaluated to determine the health impact of Toxic Air Contaminants (TACs) to the near-by receptors. If the analysis indicates that TACs are a concern, the District recommends that a Health Risk Assessment (HRA) be performed. If an HRA is to be performed, it is recommended that the project proponent contact the District to review the proposed modeling approach. Please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at hramodeler@valleyair.org. Additional information on TACs can be found online by visiting the District's website at http://www.valleyair.org/ busind/pto/Tox_Resources/AirQualityMonitoring.htm 6

If you have any questions or require further information, please call Patia Siong at (559) 230-5930.

Sincerely,

David Warner
Director of Permit Services

for Arnaud Marjollet
Permit Services Manager

DW:ps

Cc: File

Response to Comment: San Joaquin Valley Air Pollution Control District

1. Thank you for your comments. In response to quantification of project related emissions, Caltrans would required the contractor to complete an air impact analysis quantifying the project's construction-related emissions as per District Rule 9510.

2 & 3. Caltrans is aware District Rule 9510/Indirect Source Review, and concur that this project will be subject to District Rule 9510. Caltrans would require that the contractor submit Air District Rule 9510 Air Impact Analysis and pay any mitigation fees if required prior to construction and at the time of submitting the Dust Control Plan.

4. Caltrans would require that the contractor abide District Rule VIII, and if applicable to this project District Rule 4102 and District Rule 4641 as stated in the awarded contract.

5. Fresno and Madera Counties are in attainment/maintenance for the federal PM10 standard. Both counties are in non-attainment for the PM2.5 standard. The final document has been updated to reflect this fact.

6. There is one receptor within the 2.9-mile limits of the project, which is located 400 ft away from State Route 99 mainline. Caltrans policy at this time is that we follow the FHWA guidance, and that we do not do quantitative Health Risk Assessments, but FHWA has acknowledged that unusual conditions may justify going beyond the guidance. Due to the low number of receptors Caltrans does not consider this an unusual condition.

STATE OF CALIFORNIA — ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1900**
Contact FAX: **(916) 574-1885**

July 9, 2008

File Ref: SCH 2009061047
PRC 6946.9

California Department of Transportation
Sierra Pacific Environmental Analysis Branch
ATTN: G. William "Trais" Norris III, Branch Chief
2015 East Shields Avenue, Suite 100
Fresno, California 93726-5428

Subject: Notice of Availability of the Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment for the Island Park Six-Lane Project, Cities of Fresno and Madera, Fresno and Madera Counties

Dear Mr. Norris:

Staff of the California State Lands Commission (CSLC) has reviewed the subject document. Under the California Environmental Quality Act (CEQA), the California Department of Transportation (Caltrans) is the Lead Agency and the CSLC is a Responsible and/or Trustee Agency for any and all projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. 1

As background, the State acquired sovereign ownership of tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for Public Trust purposes which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The landward boundaries of the State's sovereign interests in areas that are subject to tidal action are generally based upon the ordinary high water marks of these waterways as they last existed prior to fill or artificially-induced accretions. In non-tidal navigable waterways the State holds a fee ownership in the bed of the waterway between the two ordinary low water marks. The entire non-tidal navigable waterway between the ordinary high water marks is subject to the Public Trust. The State's sovereign interests are under the jurisdiction of the CSLC.

The proposed Island Park Six-Lane Project would widen a 2.9 mile segment of State Route 99 between the cities of Fresno and Madera. In addition to widening the freeway from four lanes to six within the median, possibly realigning a frontage road, 1

widening the median shoulders, installing concrete barriers in the median, correcting the slope of the existing roadway, improving shoulder drainage, and constructing three detention basins, the project would replace the existing bridge over the San Joaquin River. The replacement bridge would be widened to accommodate eight lanes for possible future expansion, although it would be striped for six lanes for this project. The southbound section of the bridge would be widened to the west of its current alignment.

2 The State Route 99 San Joaquin River bridge crossing is subject to CSLC permit No. PRC 6946.9 issued to Caltrans pursuant to Streets and Highways Code Section 101.5 for right-of-way purposes. As the proposed bridge replacement portion of this project will involve additional State lands within the bed of the San Joaquin River, Caltrans will be required to submit an application with new right-of-way maps to the CSLC to request an amendment to the existing permit.

3 Enclosed is an application package for your use. These forms are also available at http://www.slc.ca.gov/Online_Forms/Online_Forms_Home_Page.html. Please return the completed application to the CSLC at the above address, along with a $25 filing fee and a processing deposit in the amount of $5,000. Upon receipt of the application and fees, you will be provided with a reimbursement agreement. An executed reimbursement agreement to cover the CSLC's cost to process this transaction is required as part of a complete application.

If you have any jurisdictional questions, please contact contact Kenneth Foster, Public Land Management Specialist, at (916) 574-2555 or by e-mail at fosterk@slc.ca.gov. If you have any questions on the environmental review, please contact Sarah Mongano at (916) 574-1889 or by e-mail at mongans@slc.ca.gov.

Sincerely,

Gail Newton, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
State Clearinghouse

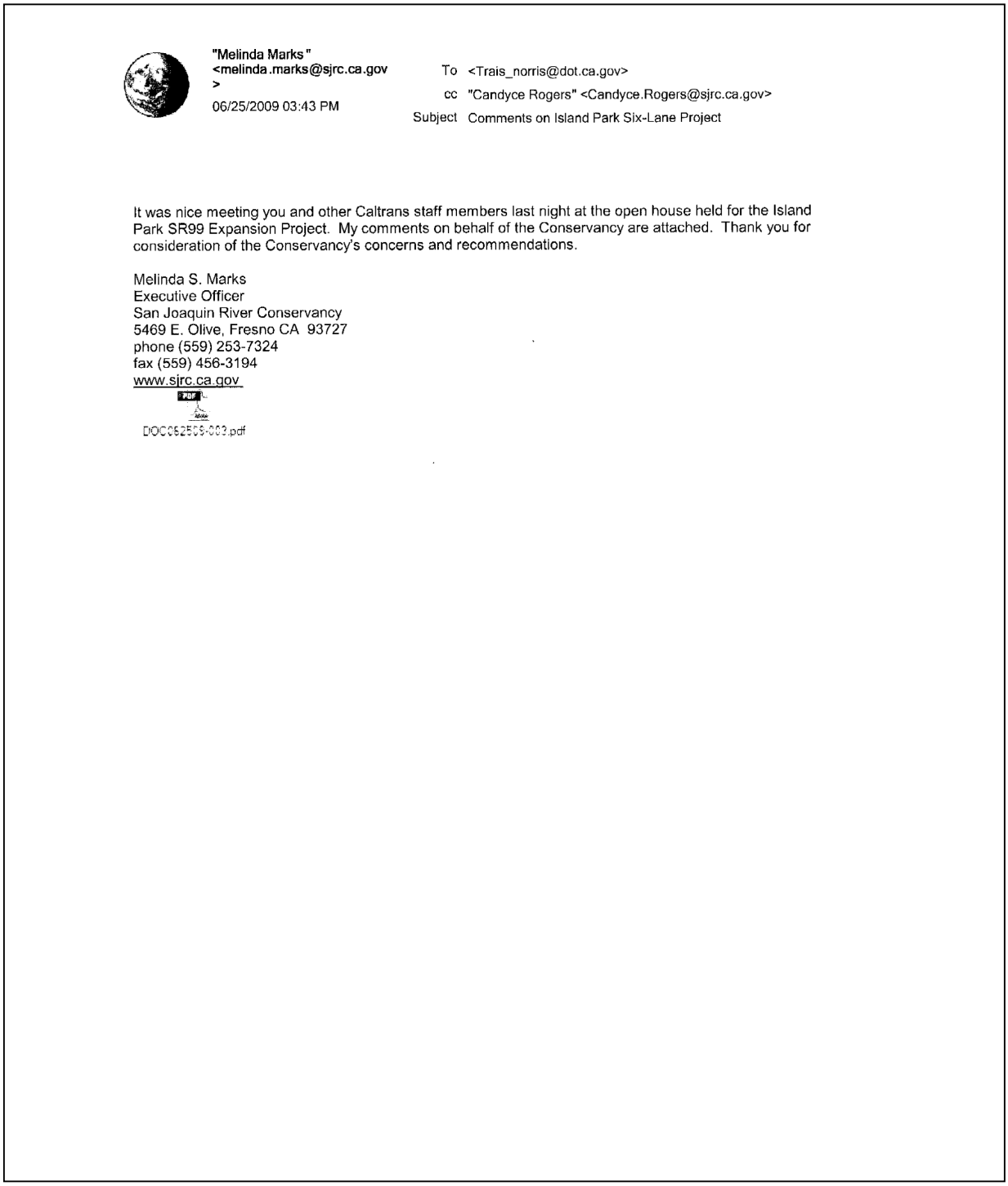
S. Mongano, CSLC
K. Foster, CSLC

Response to Comment: California State Lands Commission

1. Thank you for your comments. The design of the project has been modified to include realigning a Madera County frontage road and replacing the previously proposed basins adjacent to the San Joaquin River with biofiltration swales. One basin would still be constructed north of the Avenue 7 overcrossing. Please see Chapter 1, Secton 1.3.1 for a discussion of the Build Alternative features.

2. Caltrans would apply for a CSLC permit No. PRC 6946.6 or any appropriate California State Lands Commission permit(s) prior to construction.

3. Thank you for enclosing the application package for the CSLC permit.



"Melinda Marks" <melinda.marks@sjrc.ca.gov>
06/25/2009 03:43 PM

To <Trais_norris@dot.ca.gov>
cc "Candyce Rogers" <Candyce.Rogers@sjrc.ca.gov>
Subject Comments on Island Park Six-Lane Project

It was nice meeting you and other Caltrans staff members last night at the open house held for the Island Park SR99 Expansion Project. My comments on behalf of the Conservancy are attached. Thank you for consideration of the Conservancy's concerns and recommendations.

Melinda S. Marks
Executive Officer
San Joaquin River Conservancy
5469 E. Olive, Fresno CA 93727
phone (559) 253-7324
fax (559) 456-3194
www.sjrc.ca.gov

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SAN JOAQUIN RIVER CONSERVANCY
STATE OF CALIFORNIA

5469 E. Olive Avenue
Fresno, California 93727
Telephone (559) 253-7324
Fax (559) 456-3194
www.sjrc.ca.gov

June 25, 2009

Sent via email
Mr. G. William "Trais" Norris III, Sr. Environmental Planner
Caltrans District 6
2015 E. Shields Ave. Suite 100
Fresno, CA 93726

Dear Mr. Norris:

State Route 99 Island Park Six-Lane Project

The San Joaquin River Conservancy is a regionally governed state agency formed to develop and manage the San Joaquin River Parkway, a planned 22-mile regional natural and recreation area in the river-bottom extending from Friant Dam to Highway 99. The Conservancy's mission includes acquiring Parkway lands from willing sellers, operating and managing those lands for public enjoyment, creating an interconnected trail system throughout the Parkway, and protecting, enhancing, and restoring riparian and floodplain habitat. The Conservancy adopted the San Joaquin River Parkway Master Plan in 1997.

1

The SR99 Island Park Project will have an impact on the most downstream planned hub of the Parkway—a major future Parkway gateway and visitor use area. The Conservancy recommends the following measures to mitigate the project's impacts within the Conservancy's area of interest:

1

- Impacts on the viewshed and scenic values
  - The proposed bridge is at the entrance to the County of Fresno going south and County of Madera going north. The bridge will be the focal point for many visitors to the Parkway.
  - The bridge can positively or negatively impact the viewshed from this major state transportation corridor, and the viewshed within and along the San Joaquin River corridor—a major California river with increasing potential for recreational use and tourism.
  - The proposed bridge and associated landscape and mitigation measures have the potential to ensure in perpetuity the current degraded viewshed, or to beneficially affect the viewshed, provided the design includes architecture, aesthetic treatments, landscaping, and facades fitting to the environmental setting.

2

- Impacts on river access
  - The City of Fresno, County of Fresno, County of Madera, San Joaquin River Conservancy, San Joaquin River Parkway and Conservation Trust, and other state and local partners are actively working to increase recreational and educational access to the San Joaquin River.
  - State Route 99 creates the downstream terminus for the San Joaquin River Parkway and is planned to become a future Parkway hub—a more intensively used river recreation area and the beginning and ending point of the multiple-purpose trail planned to extend from Friant Dam to the project site.
  - The Island Park Project should not become a barrier to future public access to the planned trail system or to the river, including access for fishing and canoeing; therefore, public access should be incorporated into the features of the project. The river-bottom land acquired for right of way, habitat mitigation, and stormwater treatment, and project facilities and features should incorporate river access, trailhead staging, and canoeing rest stop uses.
  - The Conservancy and its partners would work to secure resources to manage and maintain such river access features as a part of the San Joaquin River Parkway.
  - Signage included in the project should identify the Parkway and provide directions to nearby Parkway facilities.

3

- Impacts on multi-modal transportation
  - The project has the potential to perpetuate the existing barrier to pedestrian and bicycle transportation across the river. The project can instead positively affect multi-modal transportation along both the river corridor and the highway corridor by:
    - Incorporating a pedestrian and bicycling paved trail under the bridge, and
    - Incorporating a pedestrian and bicycling deck along the bridge, connecting to public roads at Avenue 7 and to Herndon parallel to the expanded highway.
  - The project should incorporate/integrate a carpool parking area with river access and trailhead staging to encourage carpooling at this "funnel" for inter-city commuting.

4

- Impacts on River Habitat
  - The bridge should to the extent possible be a clear span of the river and floodplain.
  - Landscaping for the project should utilize to the extent possible only those plant species native to the San Joaquin River riparian corridor and floodplain.
  - Caltrans should seek opportunities to mitigate habitat impacts and impacts on elderberries or other special status species locally along the San Joaquin River.
  - Caltrans' stormwater treatment facilities for the project should be designed as treatment swales integrated into the river floodplain, and include habitat enhancement.
  - Caltrans should work with the public and nonprofit conservation land owners in the immediate vicinity of the project on the river, including the San Joaquin

5

Mr. Trais Norris
June 25, 2009
Page 3

River Conservancy, to locate areas for any required habitat mitigation and planting.

The proposed project has the potential to serve our citizens not only by relieving traffic congestion and improving traffic safety, but also by improving scenic qualities, integrating with planned tourism and recreation improvements important to the communities, enhancing habitat in the immediate area, and providing for alternative transportation modes and improving pedestrian and bicycle trail linkages. The Conservancy looks forward to working with Caltrans as it refines the project design and habitat mitigation measures.

Please contract me at (559) 253-7324 or Melinda.Marks@sjrc.ca.gov if you have any questions or need additional information.

Respectfully,

Melinda S. Marks
Executive Officer

Response to Comment: **San Joaquin River Conservancy**

1. Thank you for your comments. Caltrans will continue to coordinate with the San Joaquin River Conservancy to avoid and/or minimize impacts to the Parkway and the Conservancy due to the construction of this project. San Joaquin River Conservancy's jurisdiction ends on the east of the Union Pacific Railroad lines. Caltrans would require an estimated 25-foot temporary construction easement from the Union Pacific Railroad for the construction of the new bridge. Construction staging would take place west of the Union Pacific Railroad lines. Refer to Chapter 2, Section 2.1.1 for discussion of no impacts to the Conservancy or the Parkway and Conservation Trust.

2. No work would be done east of the Union Pacific Railroad. The design of the bridge would be determined during the final design stages of the project, and Caltrans will continue to coordinate with the San Joaquin River Conservancy, San Joaquin River Parkway, Department of Water Resources, and other respective agencies regarding the bridge design. Caltrans has met with the Parkway and the Conservancy to discuss preliminary design ideas for the new bridge in efforts to avoid and/or minimize viewshed impacts. See Chapter 2, Section 2.1.7 in this document for the discussion of visual resource minimization measures required for this project.

3. This project would not impede any current river access. Constructing new avenues of additional river access is not within the purpose and need or scope of this project. This project would not impede the trail system with the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust. Including any new trails or new trail access is not within the scope and/or purpose of this

project. Caltrans has discussed with the Conservancy it's proposed plans for a multi-purpose trail system that would begin at Friant Dam and terminate east of the Union Pacific Railroad, which would then loop back to Friant Dam. Caltrans has discussed with the Conservancy their request that an Interpretive Signage Program be included in this project. Caltrans may continue these discussions as a determination has not been reached.

4. Access for non-motorized vehicles is currently prohibited on State Route 99 within the project limits, and is posted by signage on the shoulder of the Herndon Avenue/99 northbound on-ramp. Caltrans understands the need to expand multi-modal transportation. Many issues and concerns would need to be fully studied and addressed for future possible access on/and or across the San Joaquin River Bridge. Within the scope of this project, construction staging requires additional width be provided on the proposed southbound SJ River Bridge to accommodate 4-lanes during construction of the northbound bridge. This resulting additional width would be used for future transportation needs. Therefore, the construction of this project will allow the opportunity for a bicycle/pedestrian facility on the proposed SJ River Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Should future studies and/or planning determine a need for bicycle and/or pedestrian access, this access would need to be provided if State Route 99 is a four, six or eight-lane facility. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits. Within the scope and purpose of this project Caltrans does not propose to construct carpool-parking areas. It should be noted that the City of Fresno has proposed a similar project in the area. See Chapter 2, Table 2.2 in this document for the proposed Park and Ride Facility.

5. Caltrans has been in contact with the Department of Water Resources concerning the bridge design and other respective agencies regarding the San Joaquin River Restoration Program. Refer to Chapter 2, section 2.3 in this document and the Natural Environmental Study in the Technical Studies for avoidance, minimization, and mitigation requirements for any impacts to biological resources that include riparian habitat, special concern/sensitive animal species, and threatened or endangered species due to the construction of this project. The proposed basins north and south adjacent to the San Joaquin River have been replaced with biofiltration swale stormwater treatment measures, which result in a smaller footprint and would be more aesthetically pleasing. Caltrans would like to thank the Conservancy for

providing the opportunity to establish mitigation banks for biological resources within the Conservancy's jurisdiction for future projects.

"Dave Koehler"
<DKoehler@riverparkway.org>
07/10/2009 04:30 PM

To <trais_norris@dot.ca.gov>
cc
Subject Island Park Six Lane Project Comments

Dear Mr. Norris,

Attached, please find our comments submitted for the Island Park Six Land Project.

Thank you,

Dave.

Dave Koehler, Executive Director
San Joaquin River Parkway and Conservation Trust
dkoehler@riverparkway.org
559-248-8480 fax 559-248-8474
11605 Old Friant Road
Fresno, CA 93730

Island Park 6-Lane Comments.pdf

San Joaquin River
Parkway and
Conservation Trust, Inc.

July 10, 2009

Sent Via Email

G. William Norris III, Senior Planner
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, CA 93726

Subject: Island Park Six Lane Project Environmental Assessment

Dear Mr. Norris:

Thank you for the opportunity to comment on the Island Park Six Lane Project Environmental Assessment. The River Parkway Trust is a stakeholder in establishing the San Joaquin River Parkway and we are an adjacent landowner to the Project.

The Project represents an intersection of two extremely important California corridors—the corridor of transportation, Highway 99, and the scenic corridor of the San Joaquin River, California's second largest waterway. As the project is approached, we want to stress that the planning, design, and environmental documents need to be stellar--providing for the current and future needs of these corridors.

To further the benefits of Valley residents and Californians as a whole, we recommend the Project and Environmental Assessment address the following:

1) Approach the Project design in a matter that provides public access and supporting facilities to the San Joaquin River Parkway from each of the transportation Project's four quadrants: a) Fresno County upstream of the Highway, b) Fresno County downstream of the Highway, c) Madera County upstream of the Highway, and d) Madera County downstream of the Highway
    a. Provide for a multi-purpose trail corridor north-south across river that links into the counties road system; and, provide for connections to an east-west multi-purpose trail corridor for the Lewis S. Eaton Trail of the San Joaquin River Parkway under the Project bridge
    b. On the Fresno County side upstream of the Highway, provide connections to the planned trail corridor that the

1

River Parkway Trust, City of Fresno, and PG&E are currently working on

c. The San Joaquin River is a public waterway and extensively used by canoeists and kayakers; the Project should provide for such access

2) Acquire sufficient land to provide for the Project, trail corridors and staging areas referenced above, and sufficient mitigation for impacts to the river corridor. Mitigation for impacts to the river should take place in the immediate vicinity and be incorporated into the San Joaquin River Parkway.

3) Bridge design should be reflective of the significance of the San Joaquin River Corridor, the public's investment (approximately $100 million) in the San Joaquin River Parkway. The Bridge should be designed such to enhance the scenic landscape and complement its surroundings. This is the place to make an extra investment in esthetics and avoidance of impacts to the river.

4) The storm water ponds should be redesigned from the square no-habitat facilities as outlined in the Initial Study to be multi-functional; providing for storm water runoff, yet increasing habitat. There are lots of ways to do this. Again, this is the place to go the extra step in taking progressive measures to naturalize storm water ponding functions and enhance river habitat.

5) An Interpretive Signage Program should be implemented in the Project design that will include identification of the San Joaquin River Parkway to motorists and directional signage to/from the Highway to public access sites and trails.

6) The Environmental Assessment should evaluate the impacts of the Project on the San Joaquin River Restoration Program, a State and Federal program established by Congress. http://www.restoresjr.net/

We will welcome the opportunity to work with Caltrans, San Joaquin River Conservancy, and other appropriate agencies and stakeholders to address these issues and help with a design of the Project to provide the greatest benefit to our Community.

Sincerely,

Dave Koehler
Executive Director

***Response to Comment*: San Joaquin River Parkway and Conservation Trust**

1. Thank you for your comments. Including any new trails or new trail access is not within the scope and/or purpose of this project. However, this project would not impede the trail system within the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust. Caltrans has discussed with the Parkway and Conservation Trust and the Conservancy the proposed plans for a multi-purpose trail

system that would begin at Friant Dam and terminate east of the Union Pacific Railroad, which would then loop back to Friant Dam. This project would not impede any current river access. Constructing new avenues of additional river access is not within the purpose and need or scope of this project.

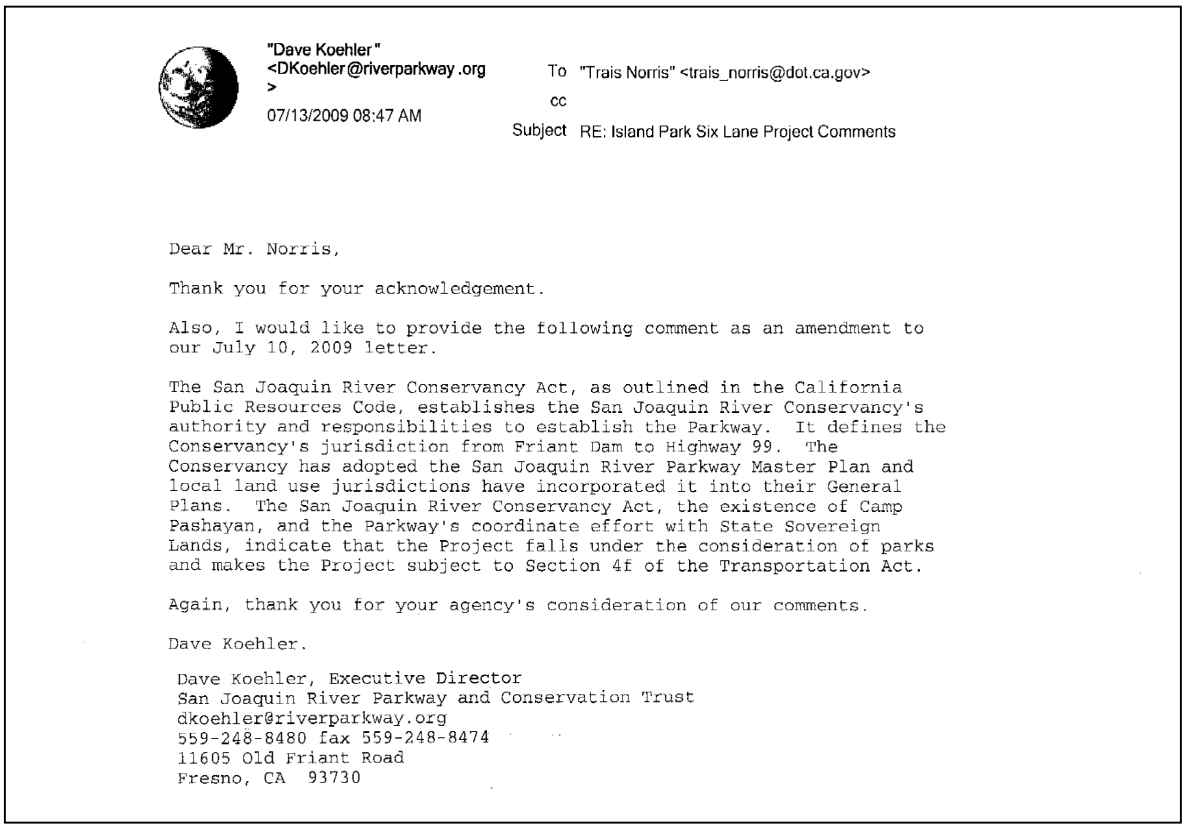
2. Caltrans would apply for required permits prior to construction (refer to Chapter 1, Table 1.4 in this document for permits and approvals required for this project). Caltrans would require a temporary construction easement from the Union Pacific Railroad for staging during construction. Caltrans would mitigate for any impacts to the river due to construction of this project (refer to Chapter 2 Section 2.2.2, and Section 2.3.2 in this document for discussion of the avoidance, minimization, and mitigation measures requirements for construction of this project).

3. The design of the bridge would be determined during the final design stages of the project. Caltrans will continue to coordinate with the San Joaquin River Parkway and Conservation Trust, the San Joaquin Conservancy, the Department of Water Resources, and other respective agencies regarding the bridge design. Caltrans has met with the Parkway and Trust and the Conservancy to discuss preliminary design ideas for the new bridge in efforts to avoid and/or minimize viewshed impacts. See Chapter 2, Section 2.1.7 in this document for the discussion of visual resource minimization measures required for this project.

4. The proposed basins north and south adjacent to the San Joaquin River have been replaced with biofiltration swale stormwater treatment measures, which result in a smaller footprint and would be more aesthetically pleasing.

5. Caltrans has discussed with the Conservancy their request that an Interpretive Signage Program be included in this project. Caltrans may continue these discussions as a determination has not been reached.

6. Caltrans has been in contact with the Department of Water Resources concerning the bridge design and will continue to coordinate with respective agencies regarding the San Joaquin River Restoration Program.



"Dave Koehler" <DKoehler@riverparkway.org>
07/13/2009 08:47 AM

To "Trais Norris" <trais_norris@dot.ca.gov>
cc
Subject RE: Island Park Six Lane Project Comments

Dear Mr. Norris,

Thank you for your acknowledgement.

Also, I would like to provide the following comment as an amendment to our July 10, 2009 letter.

The San Joaquin River Conservancy Act, as outlined in the California Public Resources Code, establishes the San Joaquin River Conservancy's authority and responsibilities to establish the Parkway. It defines the Conservancy's jurisdiction from Friant Dam to Highway 99. The Conservancy has adopted the San Joaquin River Parkway Master Plan and local land use jurisdictions have incorporated it into their General Plans. The San Joaquin River Conservancy Act, the existence of Camp Pashayan, and the Parkway's coordinate effort with State Sovereign Lands, indicate that the Project falls under the consideration of parks and makes the Project subject to Section 4f of the Transportation Act.

Again, thank you for your agency's consideration of our comments.

Dave Koehler.

Dave Koehler, Executive Director
San Joaquin River Parkway and Conservation Trust
dkoehler@riverparkway.org
559-248-8480 fax 559-248-8474
11605 Old Friant Road
Fresno, CA 93730

Response to Comment: San Joaquin River Parkway and Conservation Trust

Thank you for your comments regarding Camp Pashayan as a Section 4(f) Resource. Caltrans will continue to coordinate with you to avoid and/or minimize impacts to this resource due to this project. The San Joaquin River Conservancy's jurisdiction ends on the eastside of the Union Pacific Railroad lines as noted on the Conservancy's jurisdiction mapping, and by verbal concurrence with the Conservancy and the San Joaquin River Parkway and Conservation Trust on January 20, 2010. Caltrans would require an estimated 25-foot temporary construction easement west of the Union Pacific Railroad for the construction of the new bridge. Construction staging would take place west of the Union Pacific Railroad lines. Refer to Chapter 2, Section 2.1.1 for discussion of no impacts to the Conservancy or the Parkway and Conservation Trust.

"Laura Peterson -Diaz"
<LPDIAZ@dfg.ca.gov>
07/08/2009 12:09 PM

To "Trais Norris" <trais_norris@dot.ca.gov>
cc "Julie Vance" <JVANCE@dfg.ca.gov>, "Zach Parker" <zachary_parker@dot.ca.gov>
Subject SR 99 Island Park 6-Lane MND

Hi Trais,

We spoke on the phone on June 30 regarding this project and the Initial Study with Proposed Mitigated Neg Dec / Environmental Assessment dated June 2009. I told you at that time that I had been out to the site with Sarah Paulson on 3-2-9. The project will obviously need a 1602 permit, but everything related to that looks fairly straight forward, we will need to be aware of bat issues and all the other things that need to be addressed with bridge work, but there do not appear to be any "surprises" related to the bridge work proposed. 1

I am however very concerned about the ponding basins on either side of the river, particularly the one on the South side of the river. It is located in very close proximity to the bank of the active channel. This raises two concerns: 1) seepage of water and possible contaminants from the storm water run off into the San Joaquin River, 2) a flood event that causes the San Joaquin River to flow out on to the flood plain and would end up flowing into and out of the ponding basin. This second concern could also possibly be an issue for the basin to the north of the river. The north basin is set back farther from the bank of the active channel, so seepage will not be a problem, but while it is slightly higher then the basin to the south, it too is still within the flood plain of the San Joaquin River. 2

The construction of three detention basins is briefly mentioned in the "Summary" on page vii, and it refers to Appendix F for the map of the location. Appendix F on page 146 shows the two on either side of the river. But that is about all I could find. This issue was not addressed under 2.3 Biological Environment or under 2.2.2 Water Quality and Storm Water Runoff Regulatory Setting of the Proposed MND. 3

When I pointed out this omission to you in our phone call, you indicated that the exact location and design was still under discussion. I hope that by sending this message, I can encourage those who are proposing to put the basins in such close proximity to the river to listen to those who are advocating the basins be located farther from the river. I have also voiced my concerns regarding the two basins by the river to Zachary Parker. I have no concerns about the third basin farther to the north. 3

I hope to see a detailed discussion of this issue in the final MND regarding how seepage would be handled and what would be done in the event of a flood. Or, even better, would be new locations outside the floodplain. 2

Thank you for the opportunity to comment on this Project and for your willingness to involve DFG in the development of this Project. If you have any questions regarding these issues, please contact me.

Laura Peterson-Diaz
Environmental Scientist
Caltrans Liaison
DFG/Central Region
1234 East Shaw Avenue
Fresno, CA 93710
Voice: (559) 243-4017 ext. 225
Fax: (559) 243-4020
lpdiaz@dfg.ca.gov
Science is organized knowledge, Wisdom is organized life.
Immanuel Kant 1724-1804

Response to Comment: **California Department of Fish and Game**

1. Thank you for your comments. Caltrans will continue to coordinate with California Department of Fish and Game throughout the process of the project. Caltrans would apply for permits required by respective agencies prior to construction, including a 1602 permit (refer to Chapter 1, Table 1.4 in this document permit requirements prior to construction). Caltrans would consult with California Department of Fish and Game to determine the potential bat colony size, species, and location occurring at the San Joaquin River Bridge in the spring prior to construction. Implementation of minimization measures would be put in place to reduce impacts to potential bat species that could be using the bridge.

2. As discussed in our meeting on January 20, 2010 the proposed basins adjacent to the San Joaquin River have been replaced with biofiltration swale stormwater treatment measures. As stated in this document in Chapter 2, Section 2.2.1, the San Joaquin River is a designated floodway so the project is prohibited from creating a backwater. The existing bridge design creates a certain amount of backwater, however the new bridge structure would be designed so it would not cause any additional backwater. This project would not substantially affect the hydrology present in the project area and does not constitute a significant floodplain encroachment as defined in Code of Federal Regulations (CFR) Title 23 Section 650.105 (also refer to Hydraulic Study in the bound Technical Studies).

3. This document has been updated to include discussion of the biofiltration swales (refer to Chapter 2, Section 2.2.1 and Section 2.2.2). Currently, stormwater discharges from the bridge deck directly into the San Joaquin River. Two biofiltration swales to the west of the San Joaquin River Bridge will be constructed for storm water management treatment measures for this project. The biofiltration swales will result in a smaller footprint and less impact to riparian habitat. This document describes the function of the biofiltration swale as a vegetated channels designed to receive and convey storm water flows while meeting water quality criteria and other flow criteria. Pollutants are removed by filtration through the vegetation, uptake by plant biomass, sedimentation, absorption to soil particles, and infiltration through the soil. Pollutant removal capability is related to channel dimensions, longitudinal slope, and type of vegetation. Biofiltration swales are effective at trapping litter, total suspended solids (soil particles), and particulate metals. These biofitration swales would allow sequential sediment settling while also resulting in reduced right-of-way acquisition,

reduced riparian habitat removal, and would be more atheistically pleasing than the previously proposed basins.

ISLAND PARK

Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: BART BOHN

ADDRESS: 9302 N. VICTOR CITY: FRESNO, CA ZIP: 93711

REPRESENTING: —

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

KEEP UP THE GOOD WORK!

I would like to make the following comments for the record (please print):

THIS IS NOT ONLY IMPORTANT FOR VEHICLES ON THE SR 99 CORRIDOR, BUT ALSO FOR OTHER MEANS OF TRANSPORTATION ALONG THE CORRIDOR AND FOR THE INTERSECTION WITH THE SAN JOAQUIN PARKWAY BELOW THE NEW BRIDGE. INCLUDE PEDESTRIAN AND CYCLING ACCESS ON BRIDGE ALONG SR 99 (SIMILAR TO RECENT SR 99 FREEWAY BRIDGE ACROSS THE MERCED RIVER AND MAKE CONNECTIONS TO SURFACE ROADS IN MADERA AND FRESNO COUNTIES. ALSO, INCLUDE ACCESS DOWN TO THE PARKWAY LANDS ON BOTH SIDES OF THE RIVER. PROTECT THE PARKWAY (4F PROPERTY REQUIRING MITIGATION) BY ACQUIRING BUFFER ZONES UNDER THE BRIDGE UP/DOWN STREAM. THANKS,

Bart Bohn

"Caltrans improves mobility across California"

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Response to Comment: **Bart Bohn**

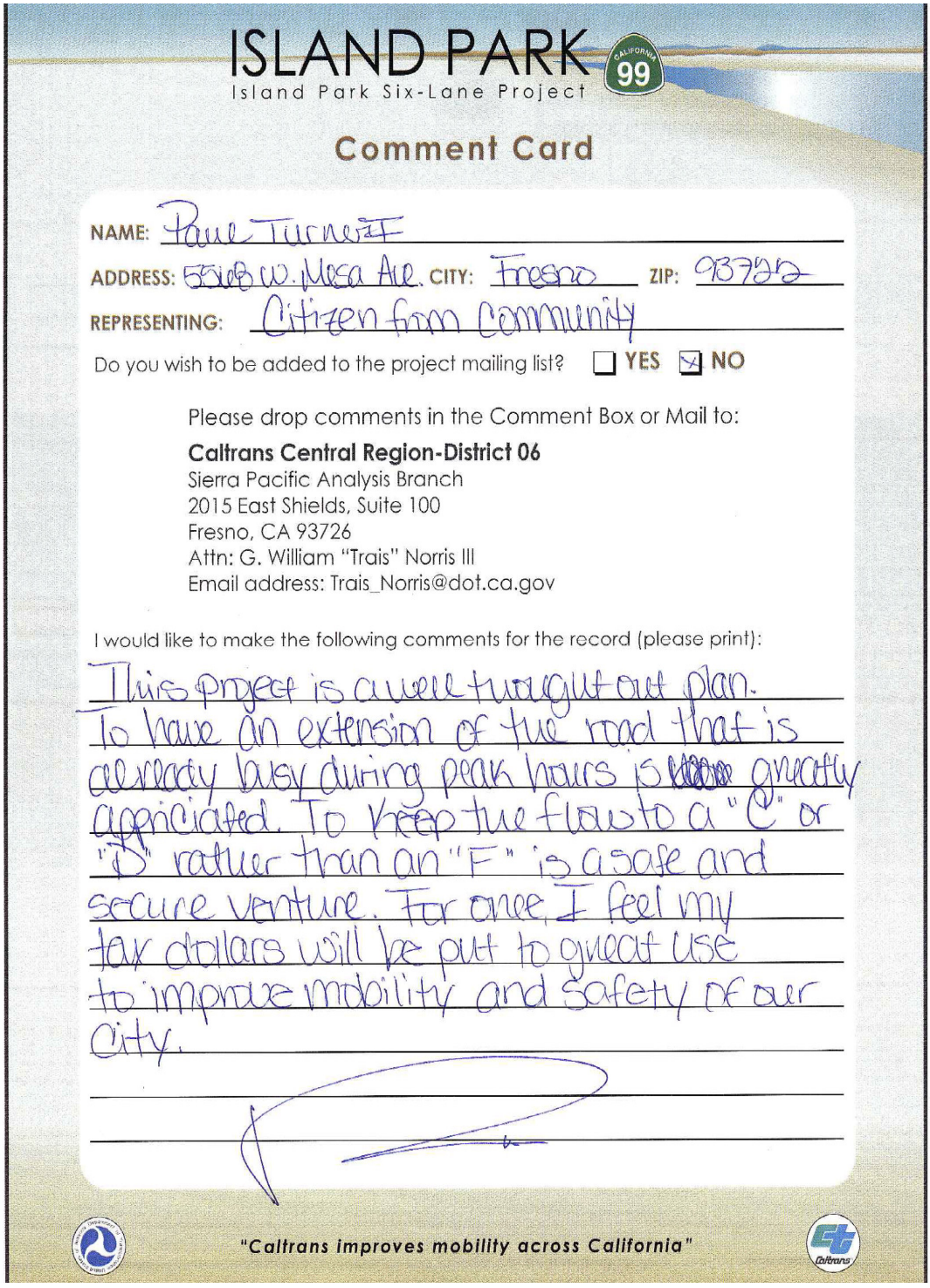
1. We appreciate your comments regarding the Island Park Project. Island Park Six Lane Project is constrained by The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. These funds may be used for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the State Route 99 corridor.

2. Caltrans understands the need to expand multi-modal transportation. Access for non-motorized vehicles is prohibited on State Route 99 within the project limits. Should future studies and/or planning determine a need for bicycle and/or pedestrian access, this access would need to be provided if State Route 99 is a four, six or eight-lane facility. The Ultimate Transportation Concept for State Route 99 is eight-lanes. Within the scope of this project, construction staging requires additional width be provided on the proposed southbound San Joaquin River Bridge to accommodate 4-lanes during construction of the northbound bridge. This resulting additional width would be used for future transportation needs. Therefore, the construction of this project will allow the opportunity for a bicycle/pedestrian facility on the proposed San Joaquin River Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Caltrans commits to participation in an ongoing dialogue with our partners to explore the opportunities associated with the new bridge shoulders. Because the Island Park bridge will have 10' shoulders, there are opportunities to consider bicycle traffic that do not exist on the current bridge, which prohibits bike traffic. We look forward to an ongoing dialogue with our partners on this issue as their plans are completed and approved, as our own bicycle planning process continues. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.

3. This project would not impede the trail system within the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust (Camp Pashayan). Caltrans has met with the San Joaquin River Conservancy and the San Joaquin River Parkway and Conservation Trust and will continue our coordination efforts, however this project does not propose to include any new or trails or new trail access.

4.Caltrans will continue to coordinate with the San Joaquin River Parkway and Conservation Trust and the San Joaquin River Conservancy to avoid and/or minimize impacts to Camp Pashayan during the construction project. Caltrans would require an estimated 25-foot temporary construction easement west of from the Union Pacific

Railroad for the construction of the new bridge. Construction staging would take place west of the Union Pacific Railroad lines, and the San Joaquin River Conservancy jurisdiction ends east of the Union Pacific Railroad lines. Refer to Chapter 2, Section 2.1.1 for discussion of no impacts to the Conservancy or the Parkway and Conservation Trust.



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: Paul Turner II

ADDRESS: 5508 W. Mesa Ave. CITY: Fresno ZIP: 93722

REPRESENTING: Citizen from Community

Do you wish to be added to the project mailing list? ☐ YES ☒ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

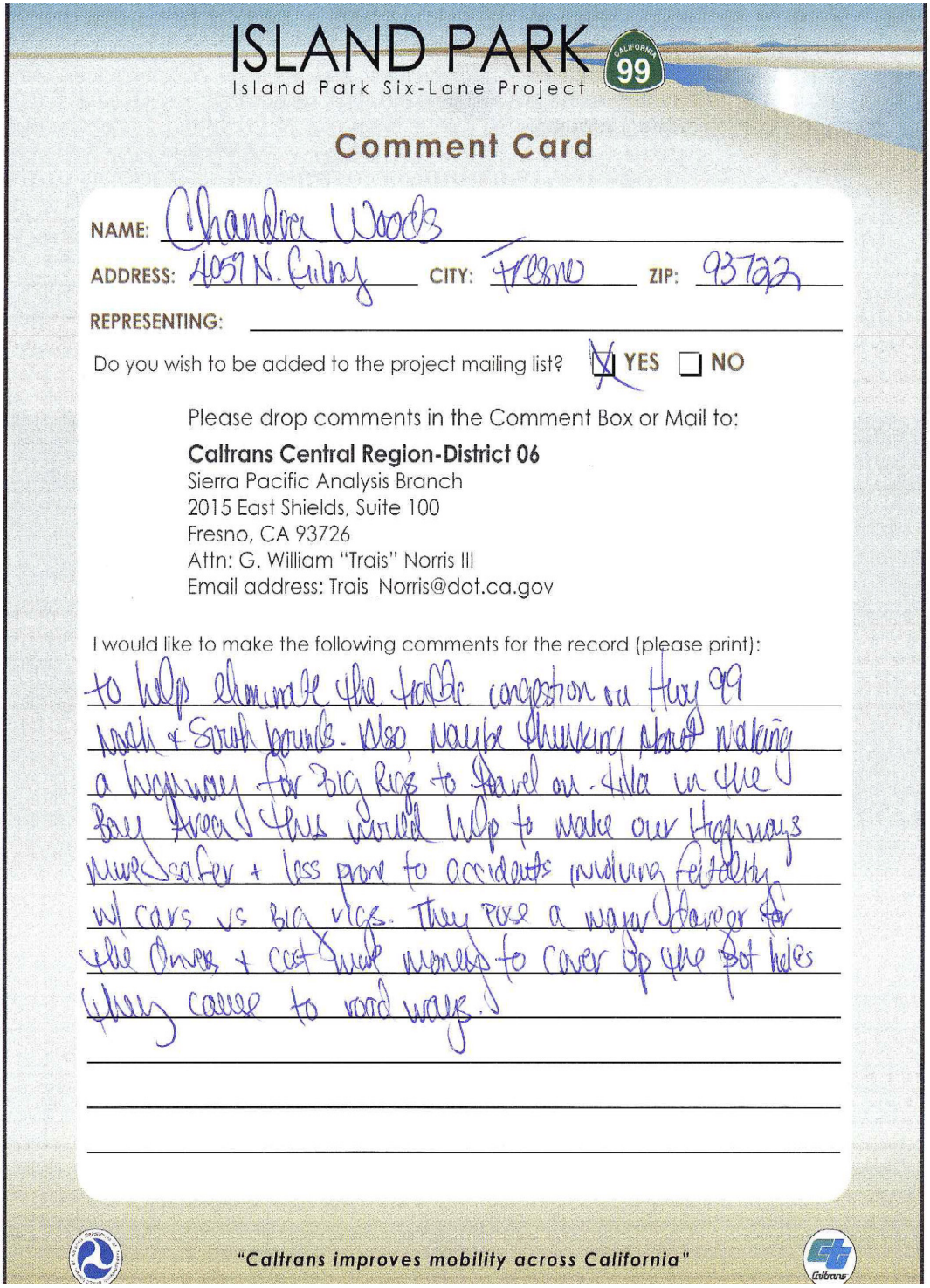
I would like to make the following comments for the record (please print):

This project is a well thought out plan. To have an extension of the road that is already busy during peak hours is greatly appreciated. To keep the flow to a "C" or "D" rather than an "F" is a safe and secure venture. For once, I feel my tax dollars will be put to great use to improve mobility and safety of our city.

"Caltrans improves mobility across California"

Response to Comment: **Paul Turner II**

Thank you for your comments and interest in the Island Park Project.



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: Chandra Woods

ADDRESS: 4059 N. Gilbert CITY: Fresno ZIP: 93722

REPRESENTING:

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

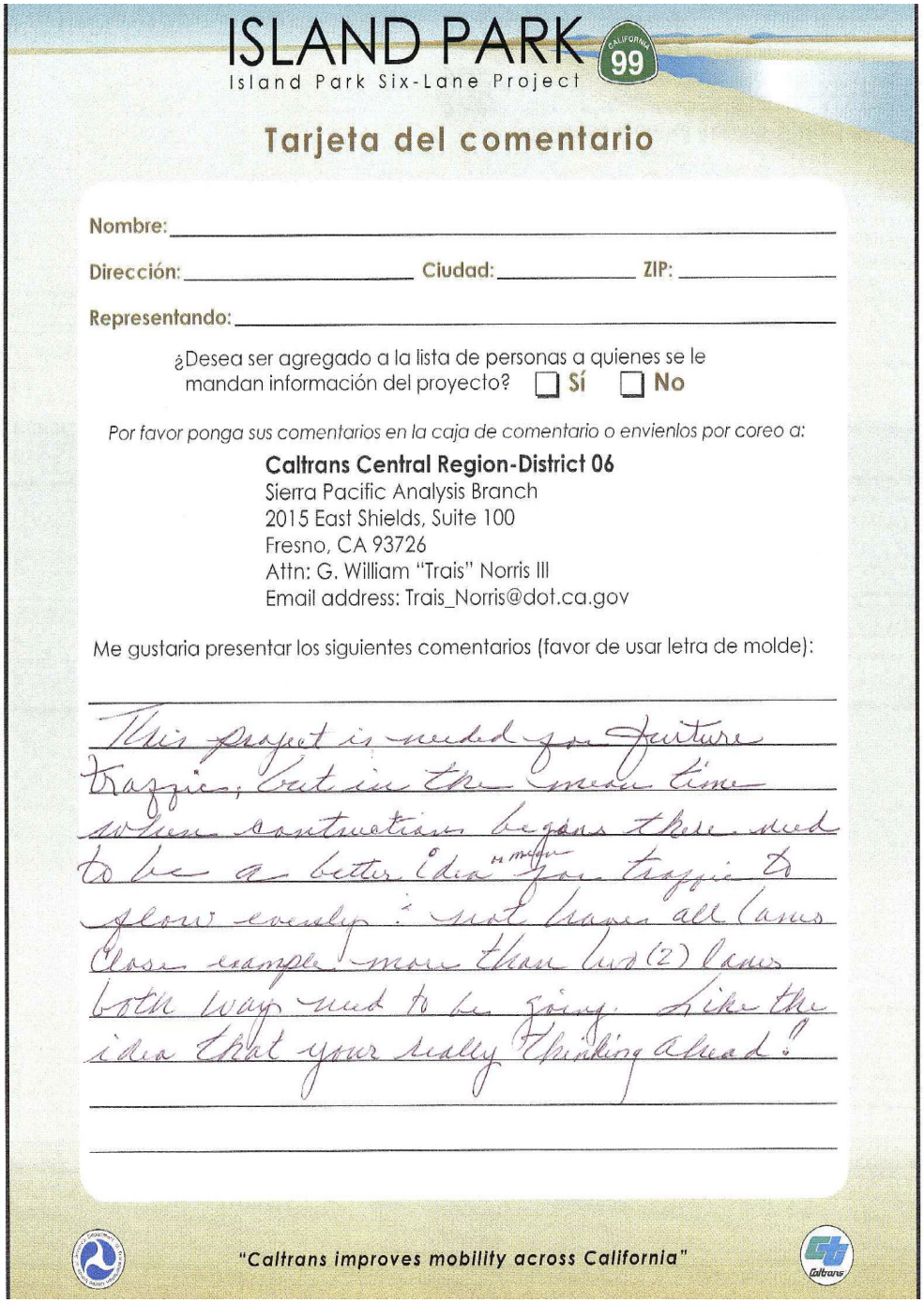
to help eliminate the traffic congestion on Hwy 99 both n South bounds. Also, maybe thinking about making a highway for Big Rigs to travel on. Like in the Bay Area. This would help to make our Highways more safer + less prone to accidents involving fatality w/ cars vs Big rigs. They pose a major danger for the drivers + cost much money to cover up the pot holes they cause to road ways.)

"Caltrans improves mobility across California"

Response to Comment: **Chandra Woods**

Thank you for your comments. It would not be economically feasible to separate truck traffic from passenger car traffic in this section of State Route 99. At this time

there are no planned alignments for specific vehicles such as truck traffic. The purpose of this project is to alleviate traffic congestion, improving traffic flow on State Route 99 and improve the safety of this section of State Route 99 by adding an additional capacity for current and future traffic.



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Tarjeta del comentario

Nombre: _____

Dirección: _____ Ciudad: _____ ZIP: _____

Representando: _____

¿Desea ser agregado a la lista de personas a quienes se le mandan información del proyecto? ☐ Sí ☐ No

Por favor ponga sus comentarios en la caja de comentario o envienlos por coreo a:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

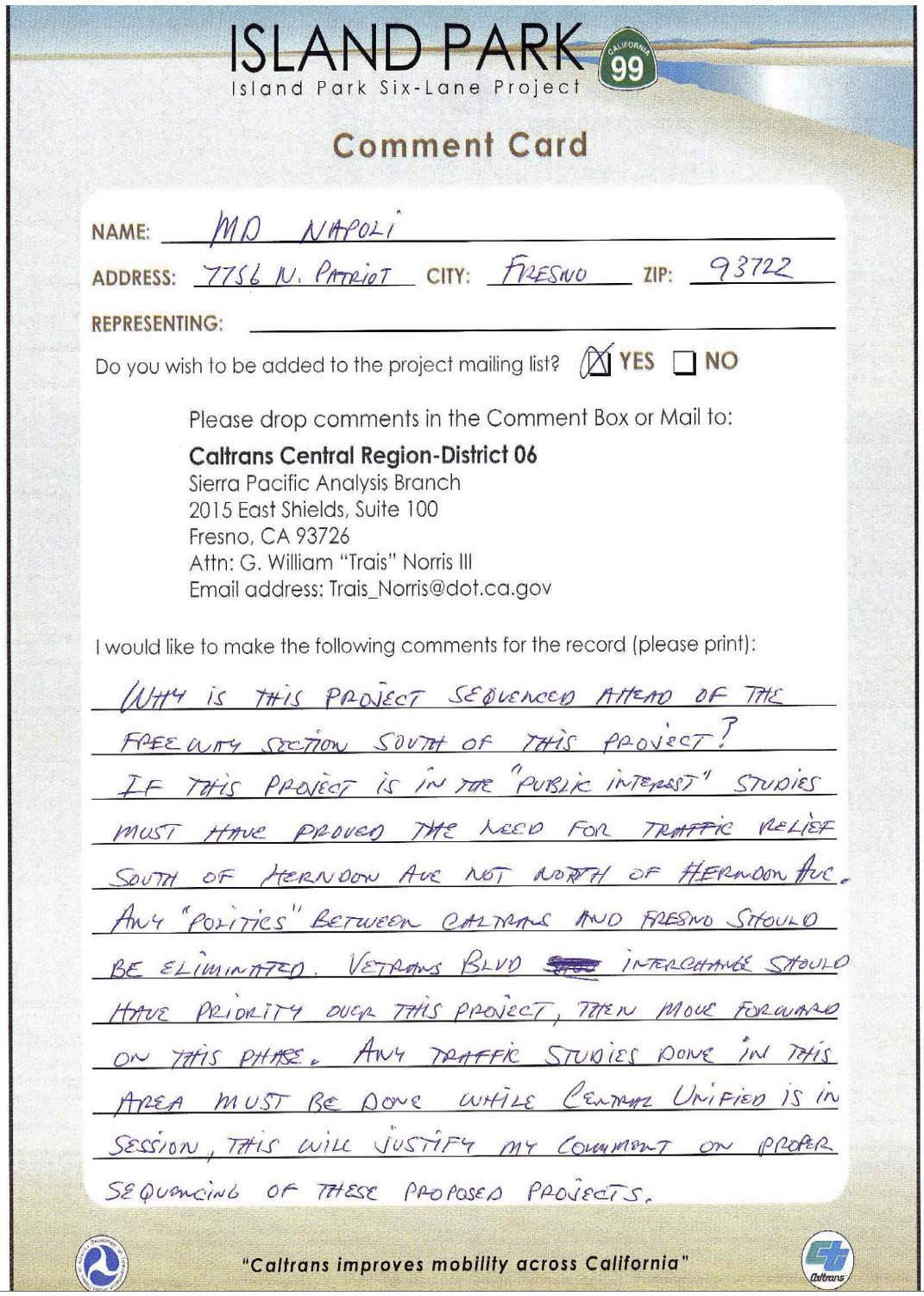
Me gustaria presentar los siguientes comentarios (favor de usar letra de molde):

This project is needed for future traffic, but in the mean time when construction begins there need to be a better idea to manage traffic to flow evenly & not have all lanes close example: more than two (2) lanes both way need to be going. like the idea that your really thinking ahead!

"Caltrans improves mobility across California"

Response to Comment: **Unknown Commenter**

Construction of the new San Joaquin River Bridge will need to take place in stages. Caltrans acknowledges there will be temporary traffic delays during construction, however a traffic management plan will be developed to minimize them while maximizing safety for motorist during construction. The traffic management plan would include, but is not limited to, details such as the use of portable changeable message signs, off-peak and night work and project phasing, and release of information through the Caltrans Public Information Office (refer to Chapter 2, Section 2.1.6 in this document).



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: MD NAPOLI

ADDRESS: 7756 N. PATRIOT CITY: FRESNO ZIP: 93722

REPRESENTING:

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

WHY IS THIS PROJECT SEQUENCED AHEAD OF THE FREEWAY SECTION SOUTH OF THIS PROJECT?

IF THIS PROJECT IS IN THE "PUBLIC INTEREST" STUDIES MUST HAVE PROVED THE NEED FOR TRAFFIC RELIEF SOUTH OF HERNDON AVE NOT NORTH OF HERNDON AVE.

ANY "POLITICS" BETWEEN CALTRANS AND FRESNO SHOULD BE ELIMINATED. VETRANS BLVD ~~SHOU~~ INTERCHANGE SHOULD HAVE PRIORITY OVER THIS PROJECT, THEN MOVE FORWARD ON THIS PHASE. ANY TRAFFIC STUDIES DONE IN THIS AREA MUST BE DONE WHILE CENTRAL UNIFIED IS IN SESSION, THIS WILL JUSTIFY MY COMMENT ON PROPER SEQUENCING OF THESE PROPOSED PROJECTS.

"Caltrans improves mobility across California"

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Response to Comment: MD Napoli

1. The North Fresno Six Lane Project and Island Park Six Lane Project were initially one project and were split in 2008. The North Fresno Six Lane Project will widen the existing four-lane freeway to a six-lane freeway in the median from Ashlan Avenue

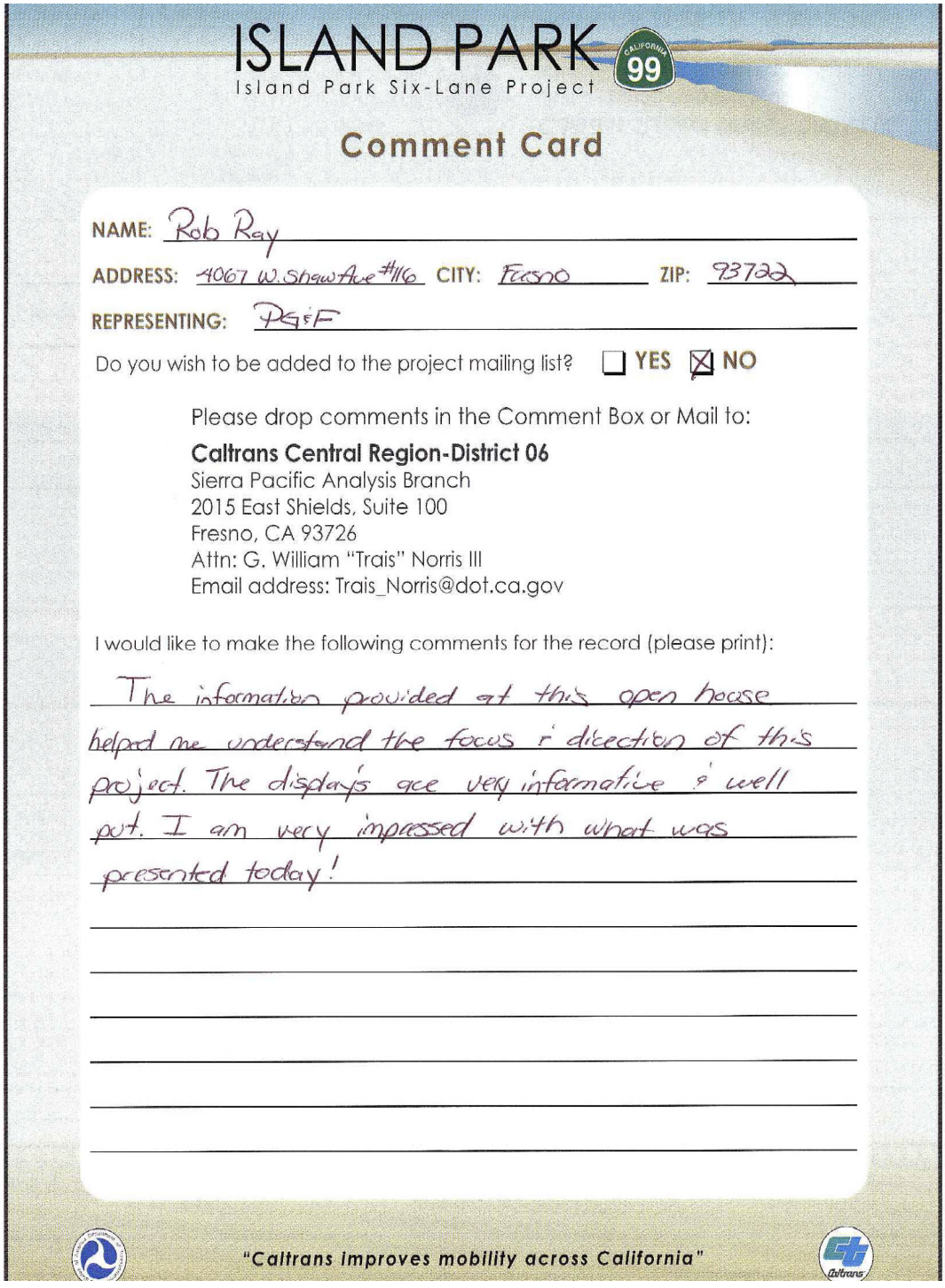
to north of the Grantland Avenue undercrossing in Fresno County and is expected to begin construction in Fall 2010. The Island Park Project would match the North Fresno Six Lane Project and provide a continuous six-lane freeway through the city of Fresno into Madera County and would start construction in 2012. This information was made available at the Island Park Project Public Hearing in June 2009. This project meets the functional goals explained in the *Route 99 Corridor Business Plan (2005)* and *Route 99 Corridor Enhancement Master Plan (2005)* which recognized the needs of route's safety, capacity, operations, and road conditions for the 274 mile segment of State Route 99 from its junction with Interstate 5 in Kern County to in the south, to the northern limits of the San Joaquin County in the north. The Master Plan was developed in conjunction with the Great Valley Center, the eight metropolitan planning organizations in the San Joaquin Valley, and the Great Valley Center Route 99 Task Force.

2. Traffic studies were completed during a two-week period in September 2007 so studies would have captured the increased trips typical of the traditional school year as opposed to the number of trips in the summer season when most schools are out of session.

3. The City of Fresno has proposed land use development mitigation at the Herndon, Shaw and Ashlan interchanges. These proposed improvements are both capacity increasing and operational improvements. The proposed Herndon Avenue Ramps Project is independent of this project and is in the initial stage of planning (refer to Chapter 2, Table 2.2 in this document for a brief overview of the Herndon Avenue project).

4. The proposed Veterans Boulevard Project is in the project approval/environmental document phase and is independent of the Island Park Project. See Chapter 2, Table 2.2 in this document for a brief description of these two projects.

2 & 5. The purpose of the Island Park Project is to alleviate traffic congestion, improve traffic flow, and improve safety of this section of State Route 99. State Route 99 is a national truck route and this project will complete the widening of State Route 99 to at least six lanes in Fresno County. Caltrans' overall goal in the State Route 99 corridor is to convert all existing expressway segments to freeway status, widen the facility to at least six lanes, improve condition of pavement and bridges, complete any needed safety improvements, improve its operational characteristics, and enhance its appearance.



ISLAND PARK
Island Park Six-Lane Project
CALIFORNIA 99

Comment Card

NAME: Rob Ray

ADDRESS: 4067 W. Shaw Ave #116 CITY: Fresno ZIP: 93722

REPRESENTING: PG&E

Do you wish to be added to the project mailing list? ☐ YES ☒ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

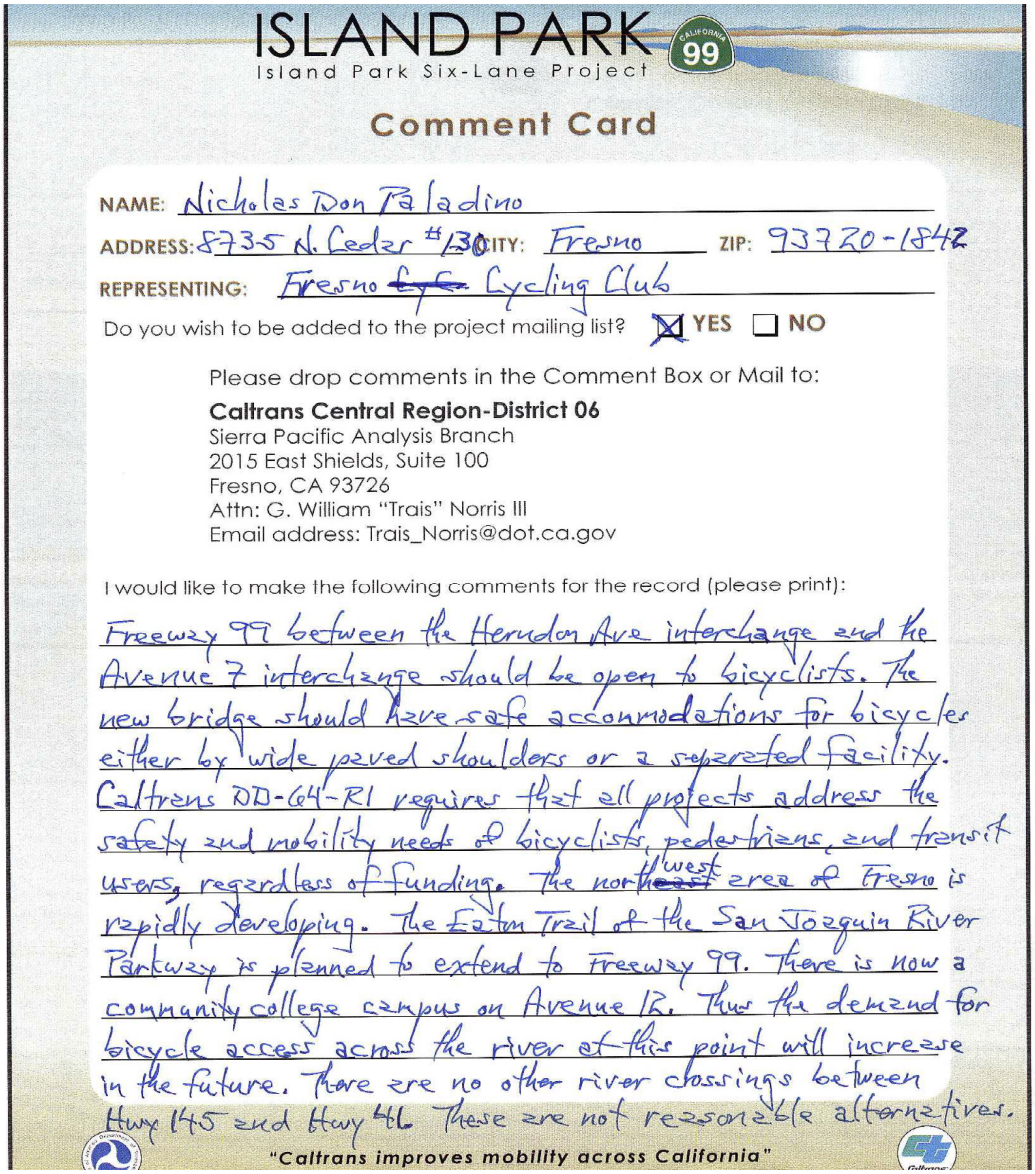
I would like to make the following comments for the record (please print):

The information provided at this open house helped me understand the focus & direction of this project. The displays are very informative & well put. I am very impressed with what was presented today!

"Caltrans improves mobility across California"

Response to Comment: Rob Ray

Thank you for your comments and your interest in the project.



ISLAND PARK
Island Park Six-Lane Project
CALIFORNIA 99

Comment Card

NAME: Nicholas Don Paladino

ADDRESS: 8735 N. Cedar #130 CITY: Fresno ZIP: 93720-1842

REPRESENTING: Fresno ~~Cyc~~ Cycling Club

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

1 Freeway 99 between the Herndon Ave interchange and the Avenue 7 interchange should be open to bicyclists. The new bridge should have safe accommodations for bicycles either by wide paved shoulders or a seperated facility.

2 Caltrans DD-64-R1 requires that all projects address the safety and mobility needs of bicyclists, pedestrians, and transit users, regardless of funding.

3 The northeast ~~east~~ west area of Fresno is rapidly developing. The Eaton Trail of the San Joaquin River Parkway is planned to extend to Freeway 99. There is now a community college campus on Avenue 12. Thus the demand for bicycle access across the river at this point will increase in the future.

4 There are no other river crossings between Hwy 145 and Hwy 41. These are not reasonable alternatives.

"Caltrans improves mobility across California"

Response to Comment: Nicholas Don Paladino

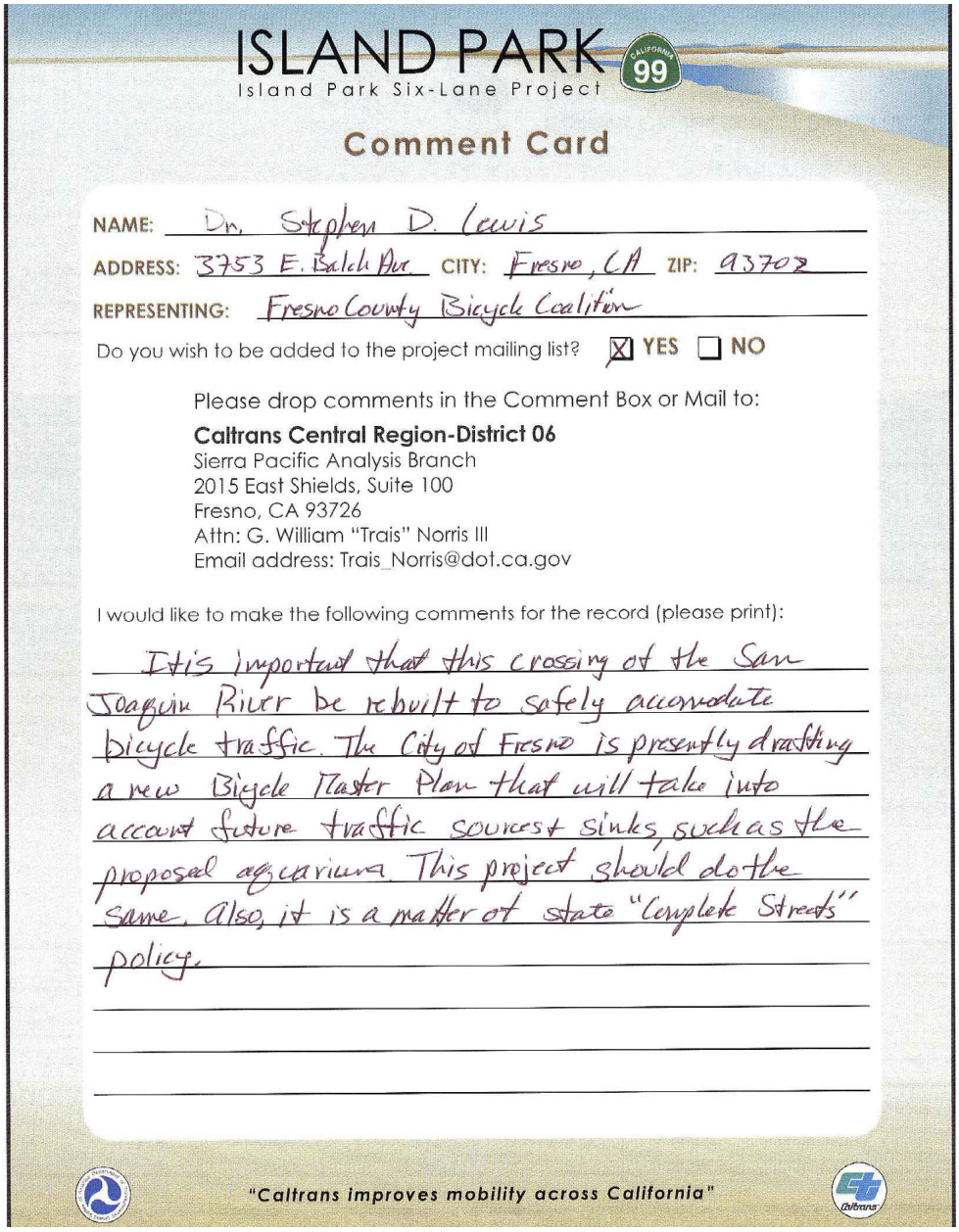
1. Thank you for your comments and your interest in this project. Access for non-motorized vehicles is prohibited on State Route 99 within the project limits, and is posted by signage on the shoulder of the Herndon Avenue/99 northbound on-ramp. Caltrans understands the need to expand multi-modal transportation, and should future studies and/or planning determine a need for bicycle and/or pedestrian access, this access would need to be provided if State Route 99 is a four, six or eight-lane facility. The Ultimate Transportation Concept for State Route 99 is eight-lanes.

Within the scope of this project, construction staging requires additional width be provided on the proposed southbound San Joaquin River Bridge to accommodate 4-lanes during construction of the northbound bridge. This resulting additional width would be used for future transportation needs. Therefore, the construction of this project will allow the opportunity for a bicycle/pedestrian facility on the proposed SJ River Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.

2. Regarding Deputy Directive DD-64-R1: This Directive states "bicyclist, pedestrians, and non-motorized traffic are permitted on all State facilities, unless prohibited (CVC, section 21960)" and finally states, "this Directive does not supersede existing laws". This project would not preclude any future plans if the opportunity were available, however access for non-motorized vehicles is currently prohibited on State Route 99 within the project limits. Funding is not the sole constriction for providing a bicycle/pedestrian facility on this segment of State Route 99 within the scope of this project. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a San Joaquin River Bridge to accommodate future transportation needs.

3. Caltrans has met with the San Joaquin River Conservancy regarding the proposed expansion of the trail system that will loop from Friant Dam to east of the Union Pacific Railroad and back to Friant Dam. Caltrans will continue to coordinate with the Conservancy and the San Joaquin River Parkway and Conservation Trust to ensure no impacts would occur to the existing trails due to the construction of this project.

4. Caltrans understands the need to expand multi-modal transportation throughout the state and Valley and will continue to coordinate with the City of Fresno, County of Fresno and the County of Madera. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans. Caltrans commits to an ongoing dialogue with our partners on this issue as their plans are completed and approved, as our own bicycle planning process continues.



ISLAND PARK
Island Park Six-Lane Project
CALIFORNIA 99

Comment Card

NAME: Dr. Stephen D. Lewis

ADDRESS: 3753 E. Balch Ave. CITY: Fresno, CA ZIP: 93702

REPRESENTING: Fresno County Bicycle Coalition

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

It is important that this crossing of the San Joaquin River be rebuilt to safely accomodate bicycle traffic. The City of Fresno is presently drafting a new Bicycle Master Plan that will take into account future traffic sources + sinks, such as the proposed aquarium. This project should do the same. Also, it is a matter of state "Complete Streets" policy.

"Caltrans improves mobility across California"

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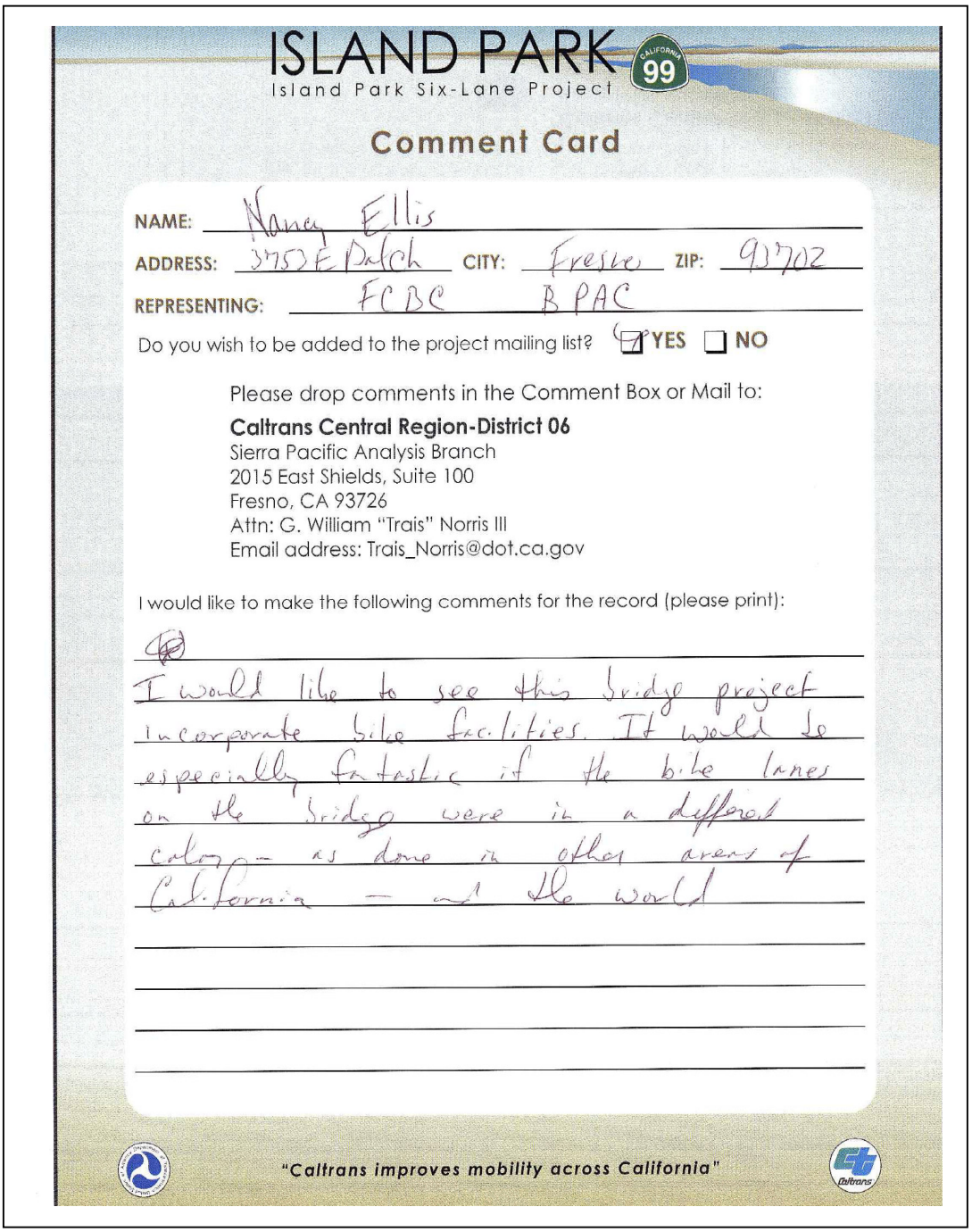
Response to Comment: **Dr. Stephen D. Lewis**

1. Thank you for your comments and your interest in this project. Caltrans understands the need to expand multi-modal transportation throughout the state. Many issues and concerns would need to be fully studied and addressed for future possible access on/and or across the San Joaquin River Bridge. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a bridge to accommodate future transportation needs and will allow the opportunity for a bicycle/pedestrian facility on the proposed San Joaquin River

Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Caltrans discussed the proposed City of Fresno Bicycle Master Plan with both the City and the consultant preparing the City of Fresno Bicycle Master Plan. The Fresno Bicycle Master Plan has not been approved and coordination efforts have not begun with the County of Madera to study the connectivity options and/or possibilities for the proposed Bicycle Master Plan. City of Fresno consultants identified the west side of State Route 99 to be the most viable location as there is a Madera County frontage road on either side could be possibly provide a connection to a trail and/or the bridge. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.

2. This project would not preclude any future plans when the opportunity for continuity connections become available. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Developing a network of "complete streets" requires the collaboration among all Department functional units and stakeholders to establish effective partnerships. The intent of the directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of "complete streets". A "complete street" provides safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorist appropriate to the function and context of the facility. This Directive does not supercede existing laws, and within the project limits access is currently prohibited to bicycles and pedestrians. The purpose of the project is to increase capacity to the State Route 99 facility. The project facility is classified as a freeway with 24 percent truck traffic.



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: Nancy Ellis

ADDRESS: 3750 E Dakota CITY: Fresno ZIP: 93702

REPRESENTING: FCBC BPAC

Do you wish to be added to the project mailing list? ☑ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

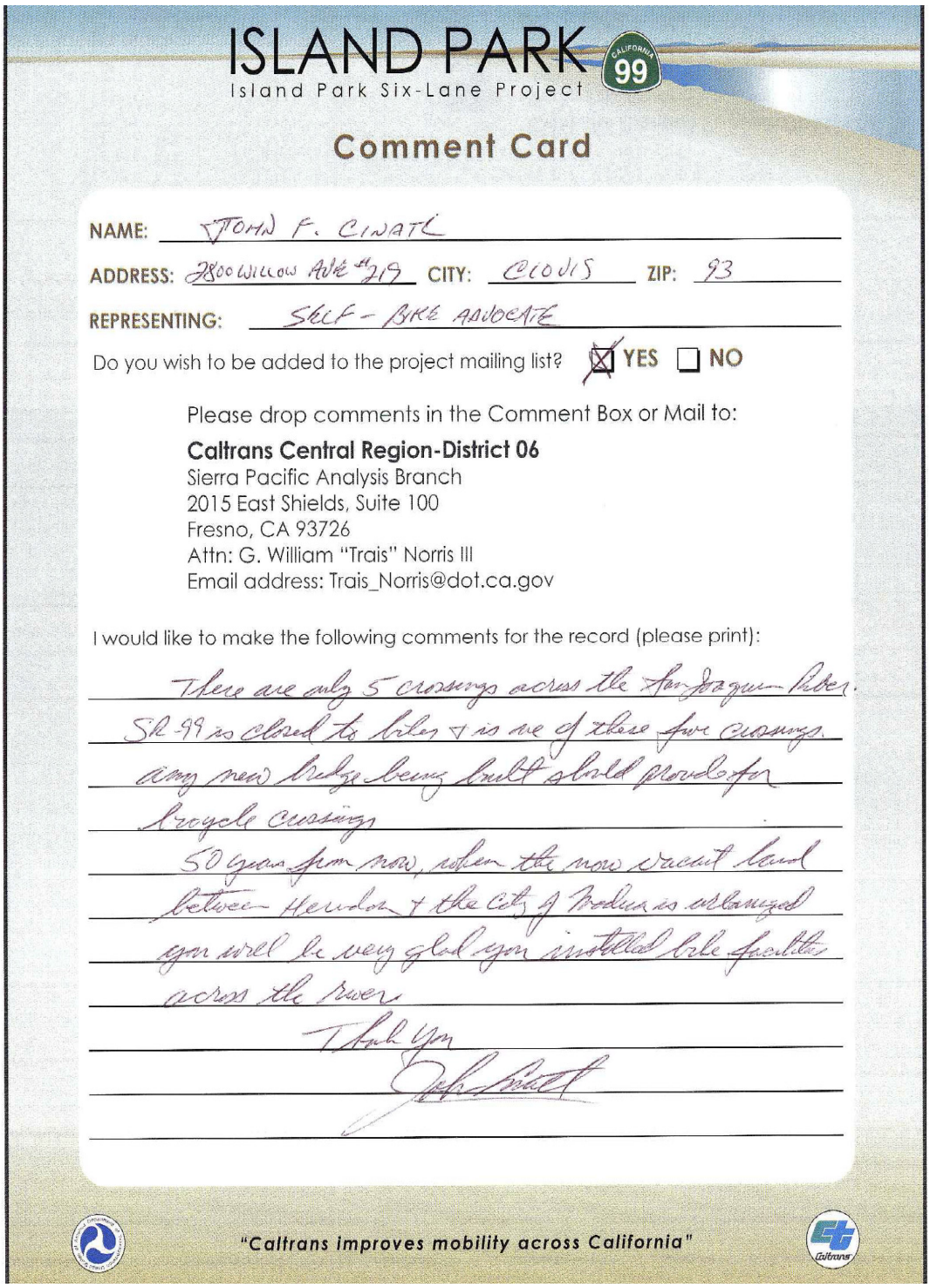
I would like to see this bridge project incorporate bike facilities. It would be especially fantastic if the bike lanes on the bridge were in a different color — as done in other areas of California — and the world

"Caltrans improves mobility across California"

Response to Comment: **Nancy Ellis**

Thank you for your comments and your interest in this project. Caltrans understands the need to expand multi-modal transportation throughout the state. Many issues and concerns would need to be fully studied and addressed for future bicycle/pedestrian access on/and or across the San Joaquin River Bridge. Access for non-motorized vehicles is prohibited on State Route 99 within the project limits. However, this project would not preclude the opportunity if available in the future whenever

connecting facilities are constructed for continuity. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.



ISLAND PARK
Island Park Six-Lane Project

CALIFORNIA 99

Comment Card

NAME: JOHN F. CINATL

ADDRESS: 2800 Willow Ave #219 CITY: Clovis ZIP: 93

REPRESENTING: SELF - BIKE ADVOCATE

Do you wish to be added to the project mailing list? ☒ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

There are only 5 crossings across the San Joaquin River. SR-99 is closed to bikes & is one of these five crossings any new bridge being built should provide for bicycle crossings

50 years from now, when the now vacant land between Herndon & the city of Madera is developed you will be very glad you installed bike facilities across the river

Thank You

John Cinatl

"Caltrans improves mobility across California"

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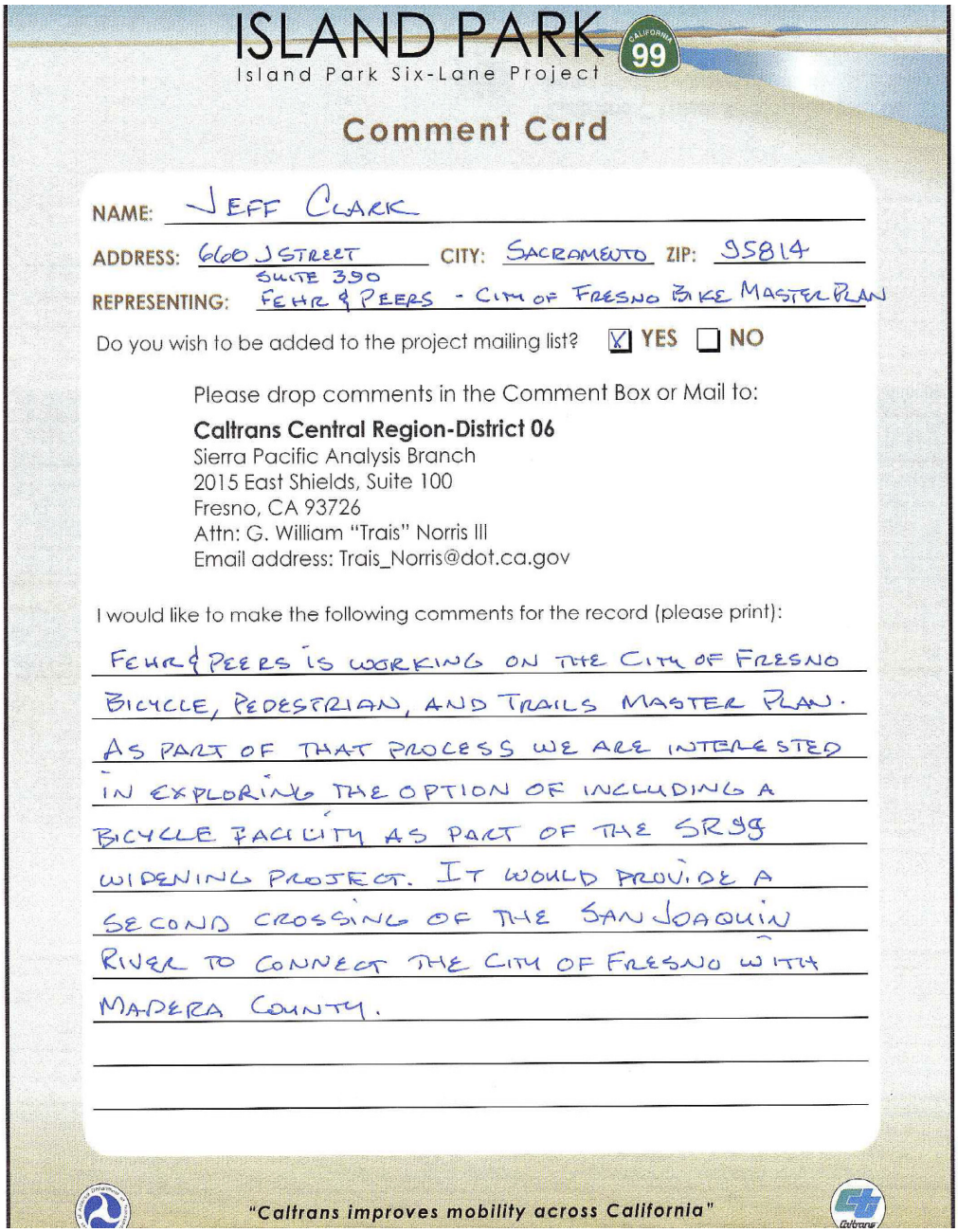
Response to Comment: **John Cinatl**

1. Thank you for your comments. Caltrans understands the need to expand multi-modal transportation throughout the state. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a SJ River Bridge to accommodate future transportation needs. Many issues and concerns would need to be fully studied and addressed for future possible access on/and or across the San Joaquin River Bridge. However, this project would not preclude the opportunity if available in the future whenever connecting facilities are constructed for continuity. Should future studies and/or planning determine a need for bicycle and/or pedestrian access, this access would need to be provided if State Route 99 is a four, six or eight-lane facility. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.

2. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans.



ISLAND PARK
Island Park Six-Lane Project

Comment Card

NAME: JEFF CLARK

ADDRESS: 660 J STREET SUITE 390 CITY: SACRAMENTO ZIP: 95814

REPRESENTING: FEHR & PEERS - CITY OF FRESNO BIKE MASTER PLAN

Do you wish to be added to the project mailing list? ☑ YES ☐ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

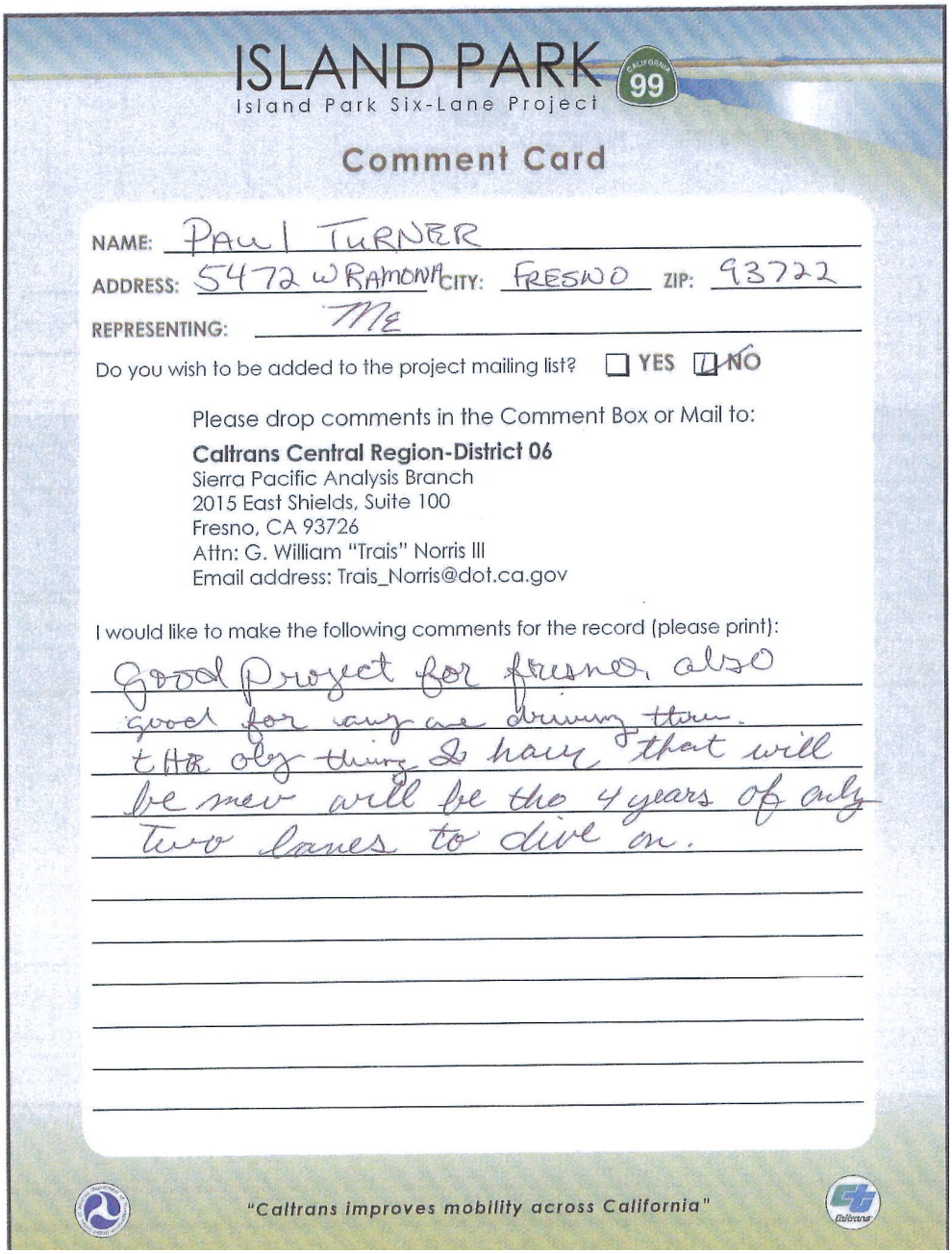
I would like to make the following comments for the record (please print):

FEHR & PEERS IS WORKING ON THE CITY OF FRESNO BICYCLE, PEDESTRIAN, AND TRAILS MASTER PLAN. AS PART OF THAT PROCESS WE ARE INTERESTED IN EXPLORING THE OPTION OF INCLUDING A BICYCLE FACILITY AS PART OF THE SR99 WIDENING PROJECT. IT WOULD PROVIDE A SECOND CROSSING OF THE SAN JOAQUIN RIVER TO CONNECT THE CITY OF FRESNO WITH MADERA COUNTY.

"Caltrans improves mobility across California"

Response to Comment: **Jeff Clark**

Thank you for your comments. Caltrans has been in contact with the City of Fresno, Fehr & Peers, and the County of Madera in regards to the proposed Bicycle Master Plan (refer to Chapter 2, Section 2.1.6). Caltrans would continue to coordinate with stakeholders as opportunities become available.



ISLAND PARK
Island Park Six-Lane Project
99

Comment Card

NAME: Paul Turner
ADDRESS: 5472 W Ramona CITY: Fresno ZIP: 93722
REPRESENTING: Me
Do you wish to be added to the project mailing list? ☐ YES ☒ NO

Please drop comments in the Comment Box or Mail to:

Caltrans Central Region-District 06
Sierra Pacific Analysis Branch
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III
Email address: Trais_Norris@dot.ca.gov

I would like to make the following comments for the record (please print):

Good Project for Fresno, also good for any one driving thru. the only thing I have that will be new will be the 4 years of only two lanes to drive on.

"Caltrans improves mobility across California"

Response to Comment: **Paul Turner**

Thank you for your comments. Caltrans acknowledges that construction will temporarily affect travel along State Route 99. A traffic management plan will be developed to minimize delays while maximizing safety for motorists during construction. The traffic management plan would include, but is not limited to, details such as the use of portable changeable message signs, off-peak and night work and

project phasing, and release of information through the Caltrans Public Information Office (refer to Chapter 2, Section 2.1.6 in this document).

June 29, 2009

Caltrans Environmental Planning
2015 East Shields, Suite 100
Fresno, CA 93726
Attn: G. William "Trais" Norris III

Re: Widening Freeway 99 over the San Joaquin River

Dear Sir,

As part of the proposed Freeway 99 – San Joaquin River project, please consider the importance of public access to the San Joaquin River Parkway, including access form Madera and Fresno Counties. Public access for hiking, cycling and canoeing/kayaking should be incorporated into the project. A separate protected pedestrian/cycling lane should be incorporated into the bridge design to connect Fresno and Madera trail systems. For future trail extension of the Parkway trail downstream from 99, a trail corridor should be provided under the bridge. 1 2 3

Consider acquiring additional land in all four quadrants to enhance access, trail connections and wildlife habitat. Parking for trail, and canoe/kayak access to the river should be considered on the high ground in Fresno and Madera Counties. Storm water retention basins should have a natural design with an emphasis on enhancing wildlife habitat. 4 5

Salmon restoration as spelled out in the settlement agreement should be incorporated into the project. The new bridge may be in an area designated for salmon spawning. Restoration planners should be consulted early in the bridge design process. 6

Thank you for your consideration.

Sincerely,

George E. Folsom
1505 W. Ellery
Fresno, CA 93711
559-351-7192 cell

Response to Comment: George E. Folsom

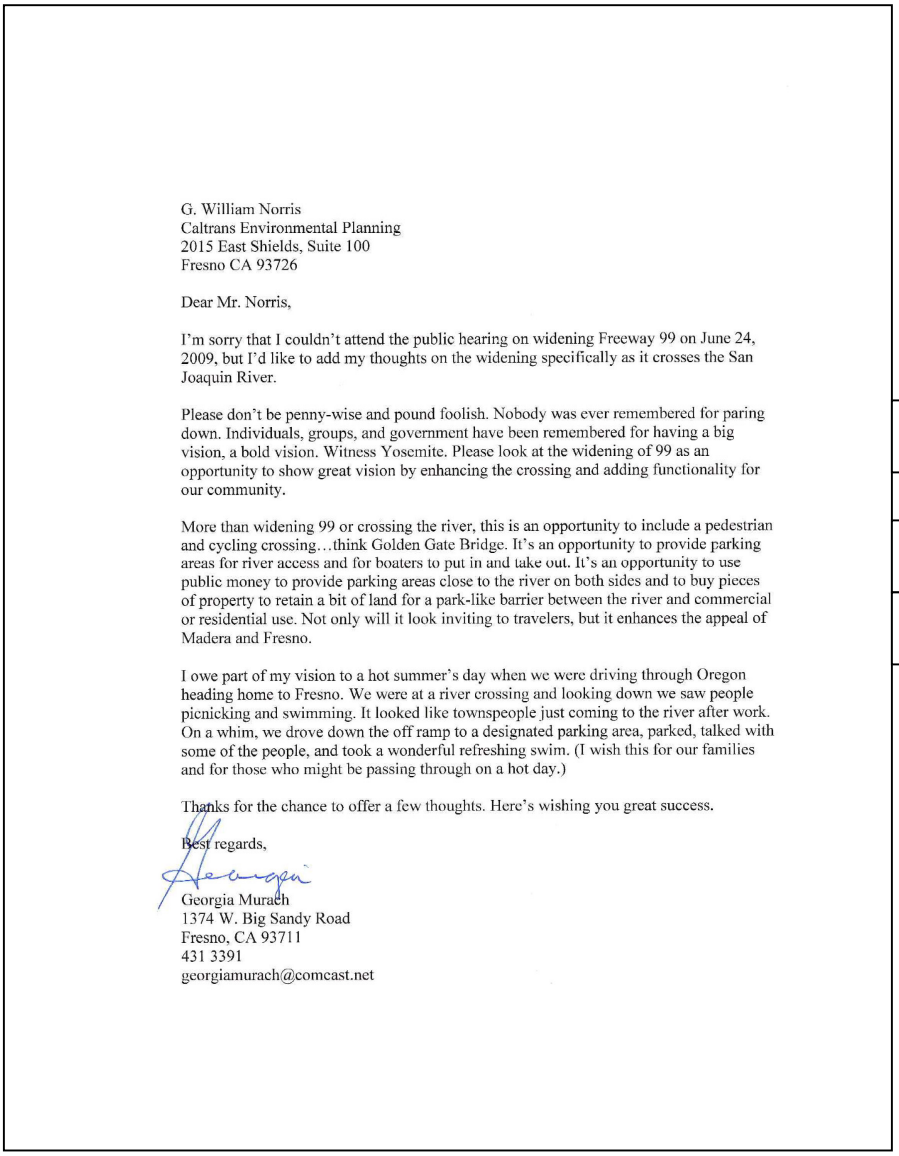
1. Thank you for your comments. Caltrans will continue coordination efforts with the San Joaquin River Conservancy and the San Joaquin River Parkway and Conservation Trust. Including new access is not within the scope and/or purpose of this project. However, this project would not impede the existing access to the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust.

2. Caltrans understands the need to expand multi-modal transportation throughout the state. The construction of this project will allow the opportunity for a future bicycle/pedestrian facility on the proposed San Joaquin River Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Many issues and concerns would need to be fully studied and addressed for future possible access on/and or across the San Joaquin River Bridge. Should future studies and/or planning determine a need for bicycle and/or pedestrian access, this access would need to be provided if State Route 99 is a four, six or eight-lane facility. Please refer to Chapter 2, Section 2.1.6 in this document for a further discussion of bicycle/pedestrian facilities within the project limits.

3 & 4. Including new trails or new trail access is not within the scope and/or purpose of this project. However, this project would not impede the trail system within the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust.

5. The project previously proposed basins for stormwater treatment measures north and south adjacent of the San Joaquin River. This proposed design has been replaced with planned biofiltration swales, which will require a smaller footprint and will be more aesthetically pleasing than the basins that were first proposed. (refer to Chapter 1, Section 1.3.3 in this document). The current bridge allows stormwater to drain directly into the San Joaquin River. This will no longer occur with the new stormwater treatment measures in place.

6. Caltrans has on-going coordination with the Department of Water Resources and respective agencies regarding the implementation of the San Joaquin River Restoration Program. As required by the National Marine Fishery Service and California Fish and Game, any migrating fish releases to the portion of the river within the project limits would be experimental and such potential releases are not expected to take place before construction of this project (refer to Chapter 3, Comments and Coordination, Appendix J Biological Opinion and Appendix G, USFWS Species List in this document in the Natural Environmental Study). No endangered or listed fish species would be introduced to the river. Caltrans will apply for and adhere to all applicable permits from the California Department of Fish and Game, U.S. Fish and Wildlife Service, Army Corps of Engineers, Regional Water Quality Board and Central Valley Flood Control. See Chapter 1, Table 1.4 in this document for permits required for this project.



G. William Norris
Caltrans Environmental Planning
2015 East Shields, Suite 100
Fresno CA 93726

Dear Mr. Norris,

I'm sorry that I couldn't attend the public hearing on widening Freeway 99 on June 24, 2009, but I'd like to add my thoughts on the widening specifically as it crosses the San Joaquin River.

Please don't be penny-wise and pound foolish. Nobody was ever remembered for paring down. Individuals, groups, and government have been remembered for having a big vision, a bold vision. Witness Yosemite. Please look at the widening of 99 as an opportunity to show great vision by enhancing the crossing and adding functionality for our community. 1

More than widening 99 or crossing the river, this is an opportunity to include a pedestrian and cycling crossing…think Golden Gate Bridge. It's an opportunity to provide parking areas for river access and for boaters to put in and take out. It's an opportunity to use public money to provide parking areas close to the river on both sides and to buy pieces of property to retain a bit of land for a park-like barrier between the river and commercial or residential use. Not only will it look inviting to travelers, but it enhances the appeal of Madera and Fresno. 2 3

I owe part of my vision to a hot summer's day when we were driving through Oregon heading home to Fresno. We were at a river crossing and looking down we saw people picnicking and swimming. It looked like townspeople just coming to the river after work. On a whim, we drove down the off ramp to a designated parking area, parked, talked with some of the people, and took a wonderful refreshing swim. (I wish this for our families and for those who might be passing through on a hot day.)

Thanks for the chance to offer a few thoughts. Here's wishing you great success.

Best regards,

Georgia Murach
1374 W. Big Sandy Road
Fresno, CA 93711
431 3391
georgiamurach@comcast.net

Response to Comment: **Georgia Murach**

1. Thank you for your comments. Caltrans will continue coordination efforts with all stakeholders to integrate multimodal projects in balance with community goals, plans, and values.

2. Caltrans understands the need to expand multi-modal transportation throughout the state. Many issues would need to be fully studied and addressed and State Route 99 prohibits the access to motorized vehicles. This project would not preclude the opportunity for possible future bicycle/pedestrian facilities. Should future studies and/or planning be completed and determine the need for bicycle/pedestrian access,

this access would need to be provided if State Route 99 were a four, six, or eight-lane facility. See Chapter 2, Section 2.1.6 for further discussion regarding bicycle/pedestrian access along this section of State Route 99.

3. Within the scope of this project, Caltrans would not include any new parking areas, river access, or trail access. However, this project would not change or impede any existing trails or river access with the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust. Caltrans would not acquire additional right or way outside of what is needed for the construction or function of this project.

Dear Mr. Norris III,

I am writing to you regarding the Island Park Six Lane Project. As a member of the Fresno Bicycle/Pedestrian Advisory Committee we are interested in all possibilities of increasing the ability of utilizing the bicycle as an alternate means of transportation to the automobile. The City of Fresno is undergoing a complete master planing of its bicycle transportation system. Currently the county of Fresno is also in the process of producing its own Bicycle Master Plan along with other city jurisdictions. I am also interested in the inter connectivity of these master plans to other jurisdictions outside the county. In my many ongoing discussions with John Cinatl, your District's Bicycle Coordinator, in regard to this matter he has brought to my attention the restriction involved with inter connectivity with Madera City and County to Fresno City and County. After reading the environmental impact report regarding the above p roject it was my understanding from the document that no consideration is being made for bicycle usage across the San Joaquin River Bridge. There are currently two trail systems being consider for this particular area. The San Joaquin River Parkway Trail and the Herndon Trail. I would like to make for the record the following items that would support such bike usage on the San Joaquin River Bridge and provide the connectivity that I am looking for:

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1) 25% of California freeways are open to bicycle travel.

2) Your Highway Design Manual Chapter 1000 - Section 1003.4 allows bicycles on freeways when an alternate does not exist - SR-145 and SR-41 (being 7+ miles east or west of 99) are not alternates.

3) Caltrans' revised DD-64-R1 (Complete Streets) requires bike facilities on all new project or rehab projects - cost alone cannot be a reason to exclude bike facilities - to quote DD-64 "all projects regardless of funding".

4) The San Joaquin River Trust is proposing trails along the San Joaquin below this bridge - the facilities should be connected to those proposed trails

5) The land area between northwest Fresno and the area south of Madera are ripe for commercial and residential development (and commuting). If you don't build bike facilities now people will look back in 20 years and say why didn't someone plan for bicycles when they rebuilt that bridge and before development occurred?

6) Air quality is a big issue - bicycling is a remedy.

7) Both the Fresno City and Fresno County's Bike Plan (both currently being re-written) will be stressing regional connectivity - this connectivity will not happen if the SR-99 bridge remains closed to bicycle travel.

8) Since, from your "information sheet", final project approval will not take place until Spring 2010, you have plenty of time to make any design changes needed to accommodate bike facilities.

9)There are currently only 5 river crossings over the San Joaquin River between Firebaugh and Millerton Lake.
Of the 5 crossings two are very highly used SR-99 and SR-41. Only one is currently open to bikes - the SR-41 bridge.

I would appreciate If you would add me to your project mailing list:
Name: Philip Decker
Address: 2252 E. Yeargin Drive, Fresno, California 93722
Representing: Bicycle/Pedestrian Advisory Committee (BPAC)

I appreciate your attention to this matter and look forward to further discussions. Thanks, Philip

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Response to Comment: **Phillip Decker**

1. Caltrans has been in contact with the County of Madera and the City of Fresno in regards to the City of Fresno's proposed Bicycle Master Plan and potential future bicycle/pedestrian facilities in the vicinity of State Route 99 or on State Route 99 within the project limits.

2. The Fresno Bicycle Master Plan has not been approved and coordination efforts have not begun with the County of Madera to study the connectivity options and/or possibilities for the proposed Bicycle Master Plan. City of Fresno consultants identified the west side of State Route 99 to be the most viable location as there is a Madera County frontage road on either side could be possibly provide a connection to a trail and/or the bridge. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans.

3. Caltrans circulated an Initial Study with a Proposed Mitigated Negative Declaration/Environmental Assessment for the draft environmental document. An Environmental Impact Report was not completed because any impacts due to this project would be less than significant with the implementation of the avoidance, minimization, and mitigation measures described in this document (refer to Appendix C in this document). It was only stated in the circulated draft environmental document that access to non-motorized vehicles were prohibited. Due to the comments received at the Public Hearing and during the circulation period, this document has been updated to include a discussion of bicycle and pedestrian facilities (refer to Chapter 2, Section 2.1.6 in this document).

4. This project would not create any trail systems or new access to the current trail systems with the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust. This project would not impede the trail system within the San Joaquin River Conservancy or the San Joaquin River Parkway and Conservation Trust. Caltrans will continue to coordinate with the Conservancy and Parkway throughout the construction of this project.

5. The Deputy Directive DD-64-R1 was signed in October 2008, and directs the Department (Caltrans) to integrate multimodal projects in balance with community goals, plans, and values. Developing a network of “complete streets” requires the collaboration among all Department functional units and stakeholders to establish effective partnerships. Caltrans has been in contact with the City of Fresno and the County of Madera regarding the proposed Bicycle Master Plan. The intent of the directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of “complete streets”. A “complete street” provides safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorist appropriate to the function and context of the facility. The purpose of the project is to increase capacity to the State Route 99 facility. The project facility is

classified as a freeway with 24 percent truck traffic. Funding is not the sole constriction for providing a bicycle/pedestrian facility on this segment of State Route 99 within the scope of this project. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a SJ River Bridge to accommodate future transportation needs. The Directive also states, "unless prohibited". Access to non-motorized vehicles is prohibited within the project limits Caltrans understands the need to expand multi-modal transportation throughout the state. Should future studies and/or planning be completed and determine the need for bicycle/pedestrian access, this access would need to be provided if State Route 99 were a four, six, or eight-lane facility, this project would not prevent the opportunity in the future when connecting facilities are constructed for continuity for a bicycle/pedestrian facility. Please refer to Chapter 2, Section 2.1.6 in this document for further discussion.

6. Commenter has been added to the project mailing list.

Dear Mr. Norris,

Since your office was closed today, Friday, July 10, 2009, and I was unable to hand deliver this comment letter to you directly by today's deadline, I have e-mailed it attached as a PDF. If you, or any of those cc'd on this e-mail cannot open the attached file, please reply and I will send out via U.S. Mail.

If you have any questions or would like to discuss this matter with me directly, please reply or call me on my cell phone below.

Very truly yours,

Tom Lang
Executive Director
direct: (559) 930-FISH (3474)
Aquarius Aquarium Institute

www.AquariusAquarium.org AquariumIslandParkComments.pdf

Aquarius Aquarium
INSTITUTE

July 10, 2009

G. William "Trais" Norris III, Branch Chief
Sierra Pacific Environmental Analysis Branch
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, California 93726-5428

Dear Mr. Norris:

1 Thank you for the opportunity to comment on the proposed "Island Park" Six-Lane Highway 99 widening project (hereinafter referred to as "the proposed Project"). We formally request that this letter be entered into the public record for this proposed project.

EXECUTIVE SUMMARY

As an adjacent property owner that has spent extensive time and public and private donor resources on its world-class public Aquarium plans, the nonprofit 501(c)(3) Aquarius Aquarium Institute (hereinafter referred to as "the Aquarium" or "we" or "us") has numerous significant concerns about the proposed Project's potential for significant impacts on the Aquarium's private property, the area's traffic circulation and the San Joaquin River's sensitive riparian habitat. The Aquarium believes the proposed Project's Initial Study does not adequately address significant impacts this major 2 construction project will have on the environment under the California Environmental Quality Act (CEQA). We respectfully request that the 3 California Department of Transportation (Caltrans), as the lead agency for this proposed $64.1 million growth-inducing, capacity-enhancing, air-quality-affecting Project, make a determination that a Mitigated Negative 4 Declaration is wholly inappropriate as the CEQA environmental document for the proposed Project and commence to prepare a full Environmental Impact Report (EIR) such as Caltrans has required for other, often less-intensive private development and local government construction projects.

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LACK OF ADEQUATE PUBLIC INPUT ON PROJECT DESIGN

In previous communications with District 6 Caltrans officials, the Aquarium repeatedly requested site plans for the portions of the proposed Project in proximity to the Aquarium property. These were not provided and we were told they had not yet been prepared. On June 24, 2009, Caltrans held a public outreach meeting at Rio Vista Middle School where a rough site plan superimposed on an aerial photo and a San Joaquin River bridge design were presented for the first time (see Figures 1 and 2 below).

5

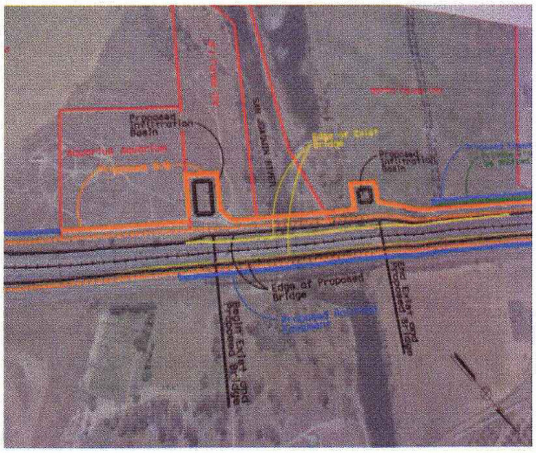

Figure 1

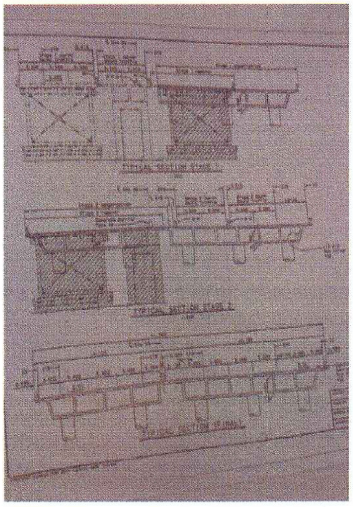

Figure 2

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7

Both designs present and depict significant encroachments onto the Aquarium's private property that is slated for Public Use similar to a park, school or open space based on our nonprofit status. The aerial rendering also showed proposed ponding basins within the sensitive San Joaquin River riparian habitat. The location of a fenced ponding basin directly abutting the Aquarium's northerly property line represents a significant visual blight and scenic vista impairment for future Aquarium visitors as well as a physical barrier to planned river access for this approved educational public institution and regional tourist destination. An EIR would provide the extensive analysis required to address this concern. (see Figure 3 below)

Figure 3 Example of a typical Caltrans fenced ponding basin

7

Had the Aquarium's input been requested by Caltrans prior to the public outreach, the Aquarium would have proposed alternate routing of the proposed Project's storm drainage system to nearby existing drainage basins operated by the Fresno Metropolitan Flood Control District. This alternative would direct potentially harmful storm runoff from the bridge and the freeway surfaces away from the sensitive riparian habitat. The Aquarium has gone to great lengths, including proposing an expensive permeable concrete parking lot, to avoid the blight of an on-site water retention basin affecting the existing scenic vista between our building and across the San Joaquin River.

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POSSIBLE SIGNIFICANT ENVIRONMENTAL IMPACTS

Beginning on October 1, 2009, the U.S. Bureau of Reclamation will begin interim flows in the San Joaquin River as part of a legal settlement between the Friant Water Users Authority (et al) and the Natural Resources Defense Council (NRDC, et al) for the purpose of restoring an historic spawning habitat for "ocean-type" Chinook salmon *(Oncorhynchus tshawytscha)*. The Settlement, which has already received approximately $280 million in state and federal funding, marked the beginning of the largest river restoration ever attempted in the United States and calls for releases of water from Friant Dam to the confluence of the Merced River and the reintroduction of Chinook salmon. State and federal agencies, including the U.S. Department of Interior, Bureau of Reclamation and U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), California Department of Fish and Game (DFG), and California Department of Water Resources (DWR) organized a Program Management Team and associated Work Groups to begin work implementing the Settlement. Additional information related to the San Joaquin River Restoration Program (SJRRP) is available on the program's website at: http://www.restoresjr.net

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Related to the Settlement, President Obama signed the San Joaquin River Restoration Act on March 30, 2009, giving the Department of the Interior full authority to implement the SJRRP.

The proposed Project intersects an area of the river identified as *Reach 1* by the SJRRP Draft Fisheries Management Plan (FMP) that was released for public comment in June 2009. The Aquarium has been actively involved in SJRRP Fisheries Management Technical Feedback meetings and based on information received at the meetings has three major concerns about the proposed Project's potential short-term and long-term significant impacts to the SJRRP plans to restore the river:

1. Construction of a new Highway 99 bridge over *Reach 1* will necessarily include significant disturbance of the riparian habitat and will impede migration of Chinook salmon and other fish due to intensive construction activities. The success of the SJRRP and the investment of state and federal funds will be diminished unless construction is scheduled during times of the year when migrating salmon and smolts are not present. Juvenile Chinook may spend from 3 months to 2

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years in freshwater before migrating to estuarine areas as smolts and then into the ocean to feed and mature.

7

2. The location of two fenced ponding basins in the sensitive riparian habitat will represent a threat to migrating salmon, smolts and other species should the river ever flood. In 1997, a flood event caused the river to inundate the areas proposed for these ponding basins. The Aquarium's concern is that during such an event adult salmon and smolts will become entrapped or entrained within these basins causing mortalities.

9

3. Chemical constituents from the freeway and bridge runoff contained in the proposed basins will contaminate the river water. Without a detailed analysis of the chemical constituents contained in the proposed Project's runoff water, there is not enough information to make an informed evaluation and/or recommendations for mitigation of potential impacts without an exhaustive analysis to determine the level of significance in accordance with CEQA. Again, a full EIR would address these concerns.

LACK OF SECURED FUNDING FOR PROJECT COMPONENTS

10

Within the proposed Project's Initial Study, the removal of the Grantland Avenue off-ramp from southbound Highway 99 is mentioned along with other project proposals in a table on page 17. The funding for this ramp closure is identified as coming from the developer (O&S Holdings, LLC) of the "El Paseo" shopping center proposed within the City of Fresno on the east side of Highway 99. Since this project has yet to complete its Environmental Impact Report and entitlements for the shopping center have not yet been approved, it is premature to identify this developer as a funding source for any improvements adjacent to, or concurrent with, the proposed Project and needs to be re-evaluated in an EIR, not in a Mitigated Negative Declaration. Compliance with the spirit of CEQA requires identification and assignment of secured financing mechanisms for proposed projects, not speculative development that has not gone through the local entitlement approval process.

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In contrast, the Aquarium has completed its environmental work and has a Conditional Use Permit (C.U.P.) in which the Aquarium has agreed to specific mitigation measures including payment to Caltrans for ramp improvements.

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5

On January 27, 2009, the City of Fresno amended its 2025 General Plan to identify the Aquarium property's land use as Public/Quasi-Public Facility, and, on April 15, 2009, the Fresno County Local Agency Formation Commission (LAFCo) voted to approve annexation of the Aquarium's property into the City of Fresno's adopted Sphere of Influence (SOI) – the first such expansion since the Southeast Growth Area in 2006.

To arrive at these decisions, LAFCo and City staff evaluated both current and future traffic conditions in the Herndon Avenue and Highway 99 vicinity using the Aquarium's traffic impact study, which identified certain improvements at the Grantland off- and on-ramps to be funded, in part, by the Aquarium project. Yet the proposed Project lacks any extensive traffic analysis for the affected Herndon Avenue interchange and immediate local street network. When completing the traffic/circulation portion of the EIR, Caltrans needs to reference their own ***GUIDE FOR THE PREPARATION OF TRAFFIC IMPACT STUDIES,*** dated December 2002.

11 &13

LACK OF COORDINATION WITH VETERANS BOULEVARD PROJECT

On June 18, 2009, the Fresno City Council approved an expenditure of $1.8 million for an Environmental Impact Report for a proposed new "Veterans Boulevard" Highway 99 interchange. The City's Project Study Report (PSR), which was routed to Caltrans, recommended the *Base Alternative* for Veteran's Boulevard, in which the southbound Highway 99 Grantland off-ramp that currently serves the west side of 99 and will serve the Aquarium is projected for closure. In all but the *"no-build"* scenario for Veterans, the implication in this PSR seems to be that the construction of Veterans would reduce the need for improvements to the Herndon/Golden State interchange complex. The Aquarium disagrees with this analysis since the PSR doesn't address future non-peak hour traffic related to approved and pending development such as the Aquarium for which the general motoring public will still be the using the Herndon/99 interchange rather than the proposed Veterans Boulevard/99 interchange. Further, if a new Highway interchange is really needed, the state, rather than local taxpayers through Measure C, should fund it as it did for the new $51.1 million Fairmead interchange – just over twenty miles to the north.

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The Aquarium believes the Veterans PSR is deficient and fatally flawed due to the fact that it fails to analyze non-peak hour Herndon Avenue traffic that will be generated by the proposed Project, the Aquarium and other future

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Herndon/99 vicinity projects as well as significant cumulative impacts to the Shaw and Herndon interchanges as mandated by CEQA. Without the extensive analysis provided by an EIR encompassing an expanded Veterans Project Study Area including both the Shaw and Herndon interchanges, the level of impact significance and appropriate mitigation measures cannot be determined.

12

In written comments to the Fresno City Council dated June 18, 2009, the Aquarium stated that we could not support funding of a stand-alone EIR for Veterans without first completing a Cost/Benefit Value Analysis comparison for Herndon Avenue improvements without Veterans Boulevard. The recommendations contained in such an analysis would have significant impacts upon the proposed Project as currently proposed. For example, if, under a *"no-build"* scenario for Veterans, the analysis recommended widening of the Herndon Avenue undercrossing and a reconfiguration of the Herndon/Parkway intersection S/B Highway 99 on- and off-ramp complex and a grade separation at Herndon/UP Railroad to accommodate increased traffic, the proposed Project would need to include the costs for such improvements in its budget since it is within the proposed Project area.

CONCLUSIONS

2, 4 & 13

The proposed Project should not proceed under CEQA unless all the improvements at Herndon proposed within the Veterans PSR including a grade separation at the Herndon/UP Railroad are studied and funding is identified as a part of a more comprehensive transportation circulation plan for the area. The City of Fresno should also be required to expand its Project Study Area for Veterans to include both Shaw and Herndon Avenue interchanges and mitigation for Veterans should include improvements to these interchanges as part of that project's CEQA approval process.

2, 4 & 12

A full EIR for the proposed Project in coordination with the Veterans Boulevard EIR would better serve the general motoring public by providing relief from the current poor levels of service at both the Shaw and Herndon Avenue Highway 99 interchanges.

2, 4 & 12

Without the level of study that would be included in a full EIR, there is not enough information contained in the *Island Park Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment* to determine whether significant impacts exist or the extent of adequate mitigation measures that will be required under CEQA for the proposed Project.

2 & 4

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Caltrans is the leader in highway construction in the State of California and should be following the highest of standards when processing their own projects. To dismiss the need for an EIR for a $64.1 million major project results in a perception of a double standard, especially when Caltrans is a major reviewing and commenting agency for local development projects and their impacts on state facilities. Caltrans should not be so focused on speedy project delivery, but rather with providing the appropriate environmental document and mitigation under CEQA for this proposed project.

2 & 4

The Aquarium would appreciate being routed on all future decisions and rulings pertaining to this proposed Project and requests that Caltrans advise us as to our rights of appeal of any decision with which we may disagree. Also, if any Aquarium property or property to which the Aquarium holds a duly recorded easement is determined to be required for the proposed Project, we would expect to be informed of such determination prior to any public announcement of final Project plans.

14

The Aquarium thanks Caltrans for the opportunity to comment on this matter and looks forward to working with Caltrans as plans continue through the approval process.

Respectfully submitted by:

Tom Lang
Executive Director
Aquarius Aquarium Institute

cc: Roy and Betty Jura/JFJ Farms, Inc.
The Honorable Dave Cogdill, Dean Florez, Juan Arambula, Danny Gilmore, Mike Villines
Fresno City Councilmember Andreas Borgeas, Fresno County Supervisor Phil Larson
Jim Boren, Lisa Maria Boyles, Brad Branan, Russ Clemings, Bill McEwen - The Fresno Bee
Tony Boren – Council of Fresno County Governments
Randell Iwasaki, Bruce Behrens, Macolm Dougherty, Sharri Bender-Ehlert, John Liu - Caltrans
Pamela Creedon – Central Valley Regional Water Control Board
Laura Peterson-Diaz, Dean Marston - CA Department of Fish and Game
Paula Landis - Department of Water Resources
Walter C. Waidelich, Jr. - Federal Highway Administration
Monty Schmitt - Natural Resources Defense Council
Melinda Marks - San Joaquin River Conservancy
Dave Koehler - San Joaquin River Parkway and Conservation Trust
Rod Meade - San Joaquin River Restoration Program
Seyed Sadredin - San Joaquin Valley Air Pollution Control District
John Engbring, Jeff McLain, Rocky Montgomery - U.S. Fish and Wildlife Service
Doug Hampton, Rhonda Reed – National Marine Fisheries Service
Alicia Gasdick, Jason Phillips - U.S. Department of the Interior – Bureau of Reclamation

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8

Response to Comment: **Aquarius Aquarium Institute**

1. Thank you for your comments. Caltrans has included this comment in the final environment document as public record.

2. This project was approved as an Initial Study/Environmental Assessment in accordance with CEQA and NEPA requirements. The level of document is a result of a full range of technical studies, which determined that all impacts could be avoided, minimized or mitigated below a level of significance. Caltrans Headquarters Division of Environmental Analysis concurred with the level of document determination on June 6, 2009.

3. Your letter refers to the project as "growth-inducing, capacity enhancing, air quality affecting…" and below we respond to those concerns:

- Growth Inducing: The environmental document included a section that addressed growth inducement. This section includes what is known as a first-cut screening under CEQA guidelines (refer to Chapter 2, Section 2.1.2 in this document). The discussion concludes that this project would widen in the median and would not induce more growth than is planned in Fresno or Madera's general plan. The project is in response to traffic conditions and traffic forecasts based on local plans and growth projections. It is not anticipated to encourage unplanned growth from unplanned development, but to accommodate current planned land use in the counties of Fresno and Madera.
- Capacity Enhancing: One of the purposes of the project is to increase capacity.
- Air Quality: This project would not exceed National Ambient Air Quality Standards as determined by the Project Level Conformity Determination from FHWA for Air Quality as of January 6, 2010. Caltrans received Project Level Air Conformity from the Federal Highway Administration in January 2010 (see Appendix K for Federal Highway Administration Air Conformity Letter). Compliance with San Joaquin Valley Unified Air Pollution Control District Rules and Regulations during construction would reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions to less than substantial (please refer to Chapter 2, Section 2.2.5 in this document). Project-level conformity is demonstrated by showing that the project would not cause the local area to exceed carbon monoxide and/or PM_{10} standards, and that it would not interfere with "timely implementation" of Transportation Control Measures called out in the State Implementation Plan (refer to Chapter 2, Section 2.2.5 in this document). This project is considered to be a Project of Air Quality Concern because diesel trucks make up 24 percent of the total vehicles on the roadway, considerably higher than

the eight percent threshold in the horizon year of 2030. For the reasons stated earlier, no new or worsened PM_{10} and $PM_{2.5}$ violations of any standards are expected in the future. Therefore, the build and no-build alternatives are considered conforming projects under the PM_{10} and $PM_{2.5}$ conformity hot spot regulations. The project therefore complies with the PM_{10} and $PM_{2.5}$ control measures, as applicable, in the respective air quality plans (refer to Chapter 2, Section 2.2.5 in this document).

4. It should be noted that this project involves an existing transportation facility in which widening will take place in the median, with the exception of widening the San Joaquin River Bridge to the west, and that minimal right-of-way acquisition is anticipated. An Environmental Impact Report/Environmental Impact Statement would be required if the project resulted in impacts that could not be avoided, minimized, or mitigated to less than significant. The findings in the technical studies and information provided from respective agencies do not suggest the need for a higher level of document. This document describes the avoidance, minimization, and mitigation measures required to reduce impacts to less than significant (refer to Appendix C in this document for a Minimization and/or Mitigation Summary).

5. Caltrans normally presents preliminary project designs to the public and public agencies at Open Houses or Public Hearings. Proposed designs can be modified in response to public or public agency comments at this stage.

6. Your letter states, “the Aquarium’s private property that is slated for Public Use similar to a park, school or open space based on our nonprofit status.” This response is in reference to indication of a 4(f) resource. There are no 4(f) resources west of State Route 99 within the project limits as designated by the Federal Highway Administration (FHWA). Caltrans has confirmed these findings with FHWA based on the Federal Highway Administration 4(f) Policy Paper (Office of Planning, Environment and Realty Project Development and Environmental Review, March 1, 2005) which states that:

- The proposed site is not under the jurisdiction of a government agency and is not classified as any of the functions applicable under Section 4(f) as a park, recreation area, etc. Evidence of formal designation would be the inclusion of the publicly owned land, and its function as a 4(f) resource into a city of county Master Plan.

- Privately held properties, even if designated as a park, recreation area, etc. within the Master Plan, are not eligible for Section 4(f) designation.
- Publicly owned museums or aquariums will not normally be considered parks, recreational areas, or wildlife and waterfowl refuges and are, therefore, not subject to Section 4(f) unless they are significant historic properties.

7. The project previously proposed basins for stormwater treatment measures north and south adjacent of the San Joaquin River. This proposed design has been replaced with planned biofiltration swales. In response to your concerns regarding:

- Loss of riparian habitat: The previously proposed basin design has been replaced with biofiltration swales, which will require a smaller footprint and would therefore impact less riparian habitat.
- Visual blight and scenic vista impairment: As stated above, the biofiltration swales will require a smaller footprint and would be more aesthetically pleasing than the basins that were previously proposed (refer to Chapter 1, Section 1.3.3 in this document).
- Replace basins with an alternate stormwater treatment measure: As stated above, the previously proposed basins adjacent to the San Joaquin River have been replaced with biofiltration swale designs. The current bridge allows stormwater to drain directly into the San Joaquin River. This would no longer occur with the new stormwater treatment measures in place and would be an improvement due to the sequential treatment of the stormwater generated from the bridge through the biofiltration swales.
- Location of the basins: The previously proposed fenced basins ran parallel to the San Joaquin River. These basins have been replaced with biofiltration swales and no fencing is currently proposed. Final design of the biofiltration swales would be decided in the Plans, Specifications, and Estimates (or final design) phase of the project.

8. Caltrans has on-going coordination efforts with the Department of Water Resources and respective agencies regarding the implementation of the San Joaquin River Restoration Program. The construction of the new bridge would not result in any permanent impacts to the river and any temporary impacts would be minimized or mitigated. As reported by the National Marine Fishery Service (NMFS) and California Fish and Game (CDFG), any migrating fish releases to the portion of the river within the project limits would be experimental and such potential releases are

not expected to take place before construction of this project. No endangered or listed fish species would be introduced to the river. The NMFS is the regulatory authority over Federally Listed anadromous fish (i.e. salmon) and would require formal consultation if the project would affect Federally listed fish. NMFS determined that formal consultation was not warranted. Caltrans did not make the decision independently. Caltrans will continue to coordinate with NMFS and CDFG regarding the San Joaquin River Restoration Program. Please refer to Chapter 3, Comments and Coordination in this document for previous discussions with NMFS and CDFG, Appendix I Biological Opinion and Appendix G, U.S. Fish and Wildlife Service Species List in this document and in the Natural Environmental Study in the separately bound Technical Studies. Caltrans will apply for and adhere to all applicable permits from the California Department of Fish and Game, U.S. Fish and Wildlife Service, Army Corps of Engineers, Regional Water Quality Board and Central Valley Flood Control. See Chapter 1, Table 1.4 in this document for permits required for this project.

9. The reach of the San Joaquin River in the project area has been listed as impaired under the Clean Water Act 303(d) list. The causes and sources of impairment are primarily agriculture pollutants and exotic species. This project would sustain the existing water quality associated with the recreational functions of the river in the project area as required by the Federal Anti-Degradation provisions of the Clean Water Act. Previous studies conducted by Caltrans and the USEPA from 1997 to 2008 have indicated that the main constituents of concern in the stormwater generated from runoff from the roadways are trace heavy metals, debris, and sediments. These studies also include the Monitoring and Research Program Annual Data Summary Report 2008 and the Caltrans Construction Sites Runoff Characterization Study September 2002, which are posted on the Department of Transportation website. Sediments created during the construction of the project would be short-term and would not be considered a long-term impact. In addition, stormwater best management practives will be in place and the implementation of an approved Storm Water Pollution Prevention Program prior to construction. The project would replace the existing bridge with a wider span bridge. The current bridge allows stormwater to drain directly into the San Joaquin River. This would no longer occur with the new stormwater treatment measures in place, as the runoff generated from the bridge would be treated with the biofiltration swales.

10. The environmental document provides a snapshot of other proposed business, residential, and transportation projects within the project area and/or limits (refer to

Chapter 2, Table 2.1 and Table 2.2 in this document). These tables represent proposed projects that are independent of the Island Park Six Lane Project. Many projects listed are still within the initiation or early stages of planning and may continue to change in respects to design and funding. Chapter 2, Table 2.2 in this document has been updated to reflect the changes that have occurred since the circulation of the draft environmental document.

11. The Conditional Use Permit issued by the Fresno County Public Works and Planning Department on November 17, 2005 allows for the construction and operation of the Aquarium, subject to conditions. According to the County of Fresno Planning Commission, the Aquarium proposes an expected maximum attendance of 5,000 persons per each Saturday and an expected maximum attendance of 500,000 persons per each year. Traffic related concerns were expressed by the County of Fresno, Caltrans, and the City of Fresno, as the Traffic Impact Study conducted for the proposed aquarium identified impacts related to the access roads and intersections at Golden State Boulevard and Herndon Avenue, Parkway Drive and Herndon Avenue (east), and Golden State Boulevard and Herndon Avenue. Your letter referred to "the City of Fresno amending its 2025 General Plan". Noting some of the conditions the Aquarius Aquarium is subject to under its Conditional Use Permit as stated in the Fresno City Council January 27, 2009 Meeting Report, by the City of Fresno's Planning and Development Department:

- Mitigate project impacts related to northbound and southbound State Route 99 on-ramps by entering a fee agreement with Caltrans. Your letter refers to the Aquarium's "Conditional Use Permit in which the Aquarium has agreed to specific mitigation measures including payment to Caltrans for ramp improvements."
- Improve Golden State Boulevard and Herndon Avenue intersection by widening the southbound approach to two left turn lanes and one shared right through lane.
- Improve Parkway Drive and Herndon Avenue (east) by installing signalization in the intersection, widening the westbound approach to one left turn lane and one right-turn lane, widen the northbound approach to one through lane and one right turn lane, and widen the southbound approach to one left turn lane and one through lane.
- Improve Golden State Boulevard and Herndon Avenue by widening the eastbound approach to one left turn lane, two through lanes, and one right turn lane. Widen the westbound approach to one left turn lane, two through lanes,

and one right turn lane. Install a westbound right turn arrow, widen the northbound approach to one left turn lane, one through lane, and one right turn lane. Widen the southbound approach to two-left turn lanes, one through lane, and one right turn lane, and prohibit southbound U-turns.

These mitigation measures are noted as Project Specific Mitigation and are part of the Aquarius Aquarium's Mitigated Negative Declaration dated November 21, 2008. The Island Park Project will widen in the median, with exception to the San Joaquin River Bridge, throughout the project limits and would not include work to ramps during the construction of this project. Generally, increasing the capacity of State Route 99 to six-lanes will have a minimal local traffic circulation impact when compared to land use decisions and subsequent development impacts to Herndon Avenue traffic. Mitigation of local traffic circulation impacts due to current and future land use decisions are addressed through the City of Fresno's Traffic Signal Mitigation Impact Fee Program, in which the City of Fresno has awarded a construction contract to improve capacity of the Herndon Avenue and Golden State Boulevard intersection (see Chapter 2, Section 2.1.1, updated Table 2.2 in this document).

12. This project is independent of the proposed Herndon Avenue Ramp Project and the proposed Veterans Boulevard Project. Chapter 2, Section 2.1.1.1 in this document has been updated to include a brief description of the proposed Herndon Ramp and Veterans Boulevard Projects. This project is consistent with the 2025 City of Fresno General Plan, County of Fresno General Plan, 2007 Regional Transportation Plan, 2009 Federal Transportation Improvement Program, and the Madera County Regional Transportation Program. The project is consistent with state, regional and local plans. The project meets the functional goals explained in the *Route 99 Corridor Business Plan* (2005) and the *Route 99 Corridor Enhancement Master Plan* (2005). On November 7, 2006, voters approved the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B), which was programmed with funds on June 7, 2007. The act authorized $1 billion to be available to the Department of Transportation, upon appropriation in the annual budget act by the Legislature, for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the State Route 99 corridor in the San Joaquin and Sacramento Valleys. The project completes the widening of State Route 99 to six lanes within Fresno County. The project was funded in the State Transportation Improvement Program with Proposition 1B (Senate Bill 1266) funds on June 7, 2007. Inclusion in the Proposition 1B Bond program requires the preparation of a *Corridor*

System Management Plan (CSMP). The CSMP was approved by Caltrans, the Council of Fresno County Governments, and the Madera County Transportation Commission in May 2009.

13. The purpose of the Island Park Project is to alleviate traffic congestion, improve traffic flow, and improve safety of this section of State Route 99 mainline. State Route 99 is a national truck route and this project will complete the widening of State Route 99 to at least six lanes within Fresno County. This project will widen in the median, with exception to the San Joaquin River Bridge, throughout the project limits. No work will be done to ramps during the construction of this project. No work would be done to the existing at-grade rail crossing, and no new crossings would be constructed in this project. Generally, increasing the capacity of State Route 99 to six-lanes will have a minimal local traffic circulation impact when compared to land use decisions and subsequent development impacts to Herndon Avenue traffic. Generally, additional capacity does not increase traffic on local streets; without an associated land use attractor/generator on the surface streets to draw vehicles to and from the mainline. Mitigation of local traffic circulation impacts due to current and future land use decisions are addressed through the City of Fresno's Traffic Signal Mitigation Impact Fee Program. As part of the City of Fresno's on-going effort to improve local traffic circulation, the City of Fresno has awarded a construction contract to improve capacity of the Herndon Avenue and Golden State Boulevard intersection (see Chapter 2, Section 2.1.1, updated Table 2.2 in this document).

14. If right of way acquisition and/or easements are required for this project, Caltrans would contact the respective property owners during the project specifications and estimates phase (PS&E) of the project.

Dear Mr. Norris,

Please see the attached Word document regarding project comments.

Thanks,

David

David Lighthall, Ph.D.

Health Science Advisor

San Joaquin Valley Air Pollution Control District

1990 E. Gettyburg Ave.

Fresno, CA 93726

Office: 559 230-6105

Mobile: 559 285-7113

david.lighthall@valleyair.org

www.valleyair.org

Fresno County Bicycle Coalition

G. William "Trais" Norris III, Branch Chief
Sierra Pacific Environmental Analysis Branch
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, California 93726-5428

Dear Mr. Norris,

As Chair of the Fresno County Bicycle Coalition, I would like to put forward our organization's comments regarding the proposed Island Park Six-Lane Project on SR 99. Overall, the FCBC is strongly urging Caltrans to construct a bicycle facility on this bridge for a variety of reasons, including the following:

1 1. Trails are currently being planned along the San Joaquin River that will extend to the bridge from the east. Bicycle access will allow cyclists to exit or enter that trail network in an area that is proximate to existing and planned residential development.

2 2. Along similar lines, there are currently frontage roads on the west side of SR 99 that come very close to this bridge from both sides of the river. Cyclists using these roads would be able to cross the river if bike lanes were built as part of the expansion project.

3 3. Highway Design Manual Chapter 1000, Section 1003.4 states that bicycles are allowed on freeways when an alternate does not exist. SR 145 and SR 41 (seven miles west or east of SR 99, respectively) cannot be considered alternates.

3 4. Caltrans' revised DD-64-R1 (Complete Streets) requires bike facilities on all new project or rehab projects.

2 5. The City of Fresno and Fresno County are currently completing new Bicycle Master Plans. Bike lanes on SR 99 would provide a critical connection between the Fresno City and Fresno County road networks, as well as making it possible to link the Fresno and Madera County road networks.

5 6 6. Regulations stemming from the San Joaquin Valley's designation by the EPA as being in Extreme Non-Attainment status for ozone (e.g. the Indirect Source Rule 9510), in addition to California's new land-use development (SB375) and climate change (AB32) regulations, are placing

increasing requirements on localities and the private sector to reduce energy use, criteria air pollutants, and greenhouse gas emissions. Caltrans needs to be a proactive facilitator of this adaptation process by giving local governments the infrastructure they need to meet these regulatory requirements.

Thank you for providing our organization the opportunity to comment. We would be happy to provide further input to your staff. I can be reached at 559 285-7113 or via email at drlighthall@yahoo.com.

Sincerely,

David Lighthall, Ph.D.
Chair, Fresno County Bicycle Coalition

Response to Comment: **Dr. David Lightall**

1. Thank you for your comments. Caltrans has been in contact with the San Joaquin River Conservancy and the San Joaquin River Parkway and Trust and will continue to coordinate with these agencies in ensuring no impacts occur to the existing trail within their jurisdiction. Caltrans has discussed with the Conservancy the new proposed trail system that would start from Friant Dam, to east of the Union Pacific Railroad line, and loop back to Friant Dam. Within the scope of this project, Caltrans would not provide new access to the existing trails or change and/or impede access to these trail systems.

2. The construction of this project will allow the opportunity for a future bicycle/pedestrian facility on the proposed San Joaquin River Bridge. Future Local connecting facilities will initiate the course of action for a bicycle/pedestrian facility. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. Knowing the limited opportunities to cross the San Joaquin River, this project proposes a San Joaquin River Bridge to accommodate future transportation needs Coordination and collaboration with the City of Fresno, County of Fresno, and the County of Madera stakeholders would be fundamental for future planning of possible connections on and off the San Joaquin River bridge. The proposed City of Fresno Bicycle Master Plan has not been approved and coordination efforts have not begun to implement this plan with the County of Madera and study the proposed connectivity points for the City's proposed Bicycle Master Plan. City of Fresno consultants identified the west side of State Route 99 to be the most viable

location as there is a Madera County frontage road north of the San Joaquin River, west of State Route 99 that could possibly provide a connection to a trail and/or the bridge. Presently, Madera County has not adopted plans to update existing bicycle/pedestrian facilities within their county limits and is not in the process of implementing or adopting such plans. Please see Chapter 2, Section 2.1.6 in this document for further discussion of bicycle/pedestrian access.

3. Caltrans understands the need to expand multi-modal transportation throughout the state. Within the scope of this project, construction staging requires additional width be provided on the proposed southbound San Joaquin River Bridge to accommodate 4-lanes during construction of the northbound bridge. This resulting additional width would be used for future transportation needs. Therefore, the construction of this project will allow the opportunity for a bicycle/pedestrian facility on the proposed San Joaquin River Bridge.

4. The intent of the Directive 64-R1 (Complete Streets) is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of "complete streets". A "complete street" provides safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorist appropriate to the function and context of the facility. The project facility is classified as a freeway with 24 percent truck traffic. The purpose of the project is to increase capacity to the State Route 99 facility. Funding restrictions would not be the only constriction for providing current access for pedestrian and bicyclist within the scope of the Island Park Six Lane Project. Local planning is a necessary component to coordinate bicycle/pedestrian access along State Highways. The Directive states, "unless prohibited". Access to non-motorized vehicles is prohibited within the project limits and is posted by signage on the Herndon Avenue northbound on-ramp to State Route 99. Please refer to Chapter 2, Section 2.1.6 in this document for a discussion of regarding Directive 64-R1.

5. Caltrans would comply District Rule 9510/Indirect Source Review, and concurs that this project will be subject to District Rule 9510. Caltrans would require that the contractor submit Air District Rule 9510 Air Impact Analysis and pay any mitigation fees if required prior to construction and at the time of submitting the Dust Control Plan. The improvements would be located in a non-attainment area for the federal and state 8-hour ozone standards. Ozone is considered to be a regional pollutant. Currently there are no project-level analysis tools or approved guidelines. When projects are listed in an approved Regional Transportation Plan and associated

conformity analysis, the projects are considered to be conforming to the State Implementation Plan for ozone.

6. Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing greenhouse gas emissions reduction and climate change. Recognizing that 98 percent of California's greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human-made greenhouse gas emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006). This document can be found at: http://www.dot.ca.gov/docs/ClimateReport.pdf. One of the main strategies in Caltrans' Climate Action Program to reduce greenhouse gas emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 miles per hour. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in greenhouse gas emissions. See Chapter 2, Section 2.4 in this document for the discussion of Climate Change relating to this project.

-oOo-

CALTRANS PUBLIC HEARING
WEDNESDAY, JUNE 24, 2009

RIO VIST MIDDLE SCHOOL
6240 WEST PALO ALTO
FRESNO, CALIFORNIA 93722

-oOo-

Reported By:
DEVRA L. JOY, CSR
License No. 6459

1320 EAST SHAW AVENUE, SUITE 168
FRESNO, CALIFORNIA 93710
(559) 224-5511 or 1-800-248-6611

Central Valley
REPORTERS

STATEMENT OF MICHAEL NAPOLI - 5:53 P.M.

And my comments are in regards to the sequencing of this project. Why is this phase of the project ahead of what would seem like the logical phase, which would be the gap to the south of Herndon Avenue, between Herndon and Shaw Avenues, which is still two lanes? 1

If it is in regards to politics between the City of Fresno and Caltrans regarding Veterans Boulevard, it would seem that the Veterans Boulevard and south of Herndon would be proved to have more of a traffic congestion problem than north of Herndon Avenue. 2

So I would like to see any traffic studies that are conducted to justify these projects being done while Central Unified School District is in session because it appears that many of the studies have been done during hours that the school is not in session, thus changing the traffic flow dramatically south of Herndon Avenue. 3

(Whereupon, the statement concluded at approximately 5:55 p.m.)

Page 2

CENTRAL VALLEY REPORTERS
Fresno, California (559-224-5511)

State of California,
County of Fresno.

I, DEVRA L. JOY, License No. 6459, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the said proceeding was taken before me as a Certified Shorthand Reporter at the said time and place and was taken down in shorthand writing by me;

That the said proceeding was thereafter under my direction transcribed with the use of computer-assisted transcription, and that the foregoing transcript constitutes a full, true and correct report of the proceedings which then and there took place;

That I am a disinterested person to the said action.

IN WITNESS WHEREOF, I have hereunto subscribed my hand this 30th day of June, 2009.

Devra L. Joy
C.S.R. No. 6459

Page 3

CENTRAL VALLEY REPORTERS
FRESNO, CALIFORNIA (559)224-5511

Response to Comment: **Michael Napoli**

Comment made to court reporter. Our response was also made to your previously submitted comment.

1. The North Fresno Six Lane Project and Island Park Six Lane Project were initially one project and were split in 2008. The North Fresno Six Lane Project will widen the existing four-lane freeway to a six-lane freeway in the median from Ashlan Avenue to north of Grantland Avenue undercrossing in Fresno County and is expected to begin construction in Fall 2010. The Island Park Project would match the North Fresno Six Lane Project and provide a continuous six-lane freeway through the city of Fresno into Madera County and would start construction in 2012. This information was made available at the Island Park Project Public Hearing in June 2009. This project meets the functional goals explained in the Route 99 Corridor Business Plan (2005) and Route 99 Corridor Enhancement Master Plan (2005) which recognized the needs of route's safety, capacity, operations, and road conditions for the 274 mile segment of State Route 99 from its junction with Interstate 5 in Kern County to in the south, to the northern limits of the San Joaquin County in the north. The Master Plan was developed in conjunction with the Great Valley Center (GVC), the eight Metropolitan Planning Organizations in the San Joaquin Valley, and the GVC Route 99 Task Force. The purpose of the Island Park Project is to alleviate traffic congestion, improve traffic flow, and improve safety of this section of State Route 99. State Route 99 is a national truck route and this project will complete the widening of State Route 99 to six lanes in Fresno County. Caltrans' overall goal in the State Route 99 corridor is to convert all existing expressway segments to freeway status, widen the facility to six lanes, improve condition of pavement and bridges, complete any needed safety improvements, improve its operational characteristics, and enhance its appearance.

2. The City of Fresno has proposed land use development mitigation at the Herndon, Shaw and Ashlan interchange. These proposed improvements are both capacity increasing and operational improvements. The proposed Herndon Avenue Ramps project is independent of this project and is in the initiation stage of planning. The proposed Veterans Boulevard Project is in the initial stages of planning and is independent of the Island Park Project (refer to Chapter 2, Table 2.2 in this document for a brief overview of the proposed Veterans Boulevard and Herndon Avenue project).

3. Traffic studies were completed for a two-week period in September 2007 so studies captured the increased trips typical of the traditional school year as opposed to the number of trips in the summer season when most schools are out of session

Appendix K Federal Highway Administration Air Conformity Letter

U.S. Department of Transportation
Federal Highway Administration

Federal Highway Administration
California Division
January 6, 2010

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (fax)

In Reply Refer To:
HDA-CA
File #: 06-FRE &MAD
Island Park Project

Mr. Malcolm Dougherty, District Director
California Department of Transportation
District 6
P. O. Box 12616
Fresno, CA 93778-2616

RECEIVED
JAN 1 2 2010
DEPT. OF TRANSPORTATION DIST. 6
TIME:
ATTENTION: BE

Attention: Terry Goewert

Dear Mr. Dougherty:

SUBJECT: Project Level Conformity Determination for the Island Park Project, EA# 06-44262, CTIPS ID:2030000549 - FRE71203; Madera CTIPS ID:22100000270 - MAD 418002

On December 8, 2009, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for the project level conformity determination for the Island Park Project (EA# 06-44262, CTIPS ID:2030000549 - FRE71203; Madera CTIPS ID:22100000270 - MAD 418002) pursuant to 23 U.S.C. 327(a)(2)(B)(ii)(I). The project is in an area that is designated Nonattainment or Maintenance for Ozone, CO, and Particulate Matter (PM_{10}, $PM_{2.5}$).

The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The project is included in the currently conforming Council of Fresno County Governments' (COFCG) and Madera County Transportation Commissions' (MCTC) 2007 RTP and 2009 TIP. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 CFR 93.116 and 93.123, the localized $PM_{2.5}$ and PM_{10} analyses are included in the documentation. The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the Island Park Project (EA# 06-44262, CTIPS ID:2030000549 - FRE71203; Madera CTIPS ID:22100000270 - MAD 418002) conforms to the SIP in accordance with 40 CFR Part 93.

RECOVERY.GOV

If you have any questions pertaining to this conformity finding, please contact Joseph Vaughn, at (916) 498-5346.

Sincerely,

For
Walter C. Waidelich, Jr.
Division Administrator

Appendix L Resources Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

Caltrans identified a single historic-era archaeological site within the project area as the remains of a gravel company that was in service between the 1913 and the 1960's. This site is located southwest of the San Joaquin River Bridge, and within one of the previously proposed basin. This site was determined to be exempt from evaluation as specified by Caltrans' Section 106 Programmatic Agreement.

One architectural resource was determined not eligible for listing on the National Register of Historic Places. No historic properties (resources eligible for listing on the National Register of Historic Places) were found within the Area of Potential Effects of the undertaking; a finding of "no historic properties affected' was presented to the consulting parties. The Historic Property Survey Report was issued to the Department of Parks and Recreation on September 26, 2008. No correspondence has been received from the State Historic Preservation Office (part of the Department of Parks and Recreation) during the 30-day review period. As specified in the Section 106 Programmatic Agreement (Stipulation VIII. C.5.a), Caltrans assumed State Historic Preservation Office concurrence with Caltrans' determination of ineligibility of the architectural property evaluated for listing on the National Register of Historic Places in the context of the undertaking. Also, State Historic Preservation Office concurrence on the effect finding of "no historic properties affected" is understood. The Historic Property Survey Report was also sent to the other consulting parties during the formal 30-day comment period in November 2008.

Caltrans identified the San Joaquin River Parkway and Conservation Trust and the San Joaquin River Conservancy as a 4(f) resource within the project area. Caltrans has determined that the project would avoid these 4(f) resources, and would not

permanently use or hinder the preservation of any 4(f) property. No constructive use would be needed from these 4(f) resources for the construction of this project.

List of Technical Studies that are Bound Separately

Visual Impact Assessment

Cultural Resources:

- Historical Property Survey Report
- Historic Resource Evaluation Report
- Historic Architectural Survey Report
- Archaeological Survey Report

Location Hydraulic Study

Water Quality Assessment Report

Paleontological Identification Report

Hazardous Waste Materials:

- Initial Site Assessment
- Preliminary Site Investigation (Geophysical Survey)

Asbestos and Lead-containing Paint Survey

Air Quality

Noise Study Report

Natural Environment Study

Island Park Six-Lane

SCH Number: 2009061047

Type: MND - Mitigated Negative Declaration

Project Description

Caltrans proposes to widen a 2.9 mile segment of SR-99 by constructing 2 additional lanes in the median to convert the existing 4 lane freeway to a 6 lane freeway from south of the Grantland Avenue undercrossing in Fresno County, to north of the Avenue 7 overcrossing in Madera County. The work also includes replacing and widening the San Joaquin River Bridge. Three detention basins are proposed to be constructed on the west side of the highway: 2 basins would be located adjacent to the San Joaquin River and 1 basin would be located just north of the Avenue 7 overcrossing. an existing basin located east of the highway south of the Avenue 7 overcrossing would be deepened.

Project Lead Agency

Caltrans #6

Contact Information

Primary Contact:
G. William "Trais" Norris, III
California Department of Transportation, District 6
559-243-8178
2015 E. Shields Avenue, Suite 100
Fresno, CA 93726-5428

Project Location

County: Fresno, Madera
City: Fresno, Madera
Region:
Cross Streets: SR 99
Parcel No:
Township:
Range:
Section:
Base:
Other Location Info:

Proximity To

Highways: 99
Airports:
Railways: SPRR
Waterways: San Joaquin River
Schools:
Land Use: Commercial, residential, light industrial, agriculture.

Development Type

Local Action

Project Issues

Aesthetic/Visual, Agricultural Land, Air Quality, Archaeologic-Historic, Biological Resources, Flood Plain/Flooding, Landuse, Noise, Toxic/Hazardous, Traffic/Circulation, Water Quality, Wetland/Riparian, Other Issues

Reviewing Agencies (Agencies in **Bold Type** submitted comment letters to the State Clearinghouse)

State Lands Commission; Resources Agency; Department of Fish and Game, Region 4; Office of Historic Preservation; Department of Parks and Recreation; Reclamation Board; Department of Water Resources; California Highway Patrol; Air Resources Board, Transportation Projects; Integrated Waste Management Board; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission

---

Date Received: 6/12/2009 **Start of Review:** 6/12/2009 **End of Review:** 7/13/2009

CEQAnet HOME | NEW SEARCH

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☒ County Clerk

County of: Madera County Clerks Office

Address: 200 West 4th Street, Madera, CA 93637

Fresno County Clerks Office, 2221 Kern Street, Fresno, CA 93721

From:

Public Agency: California Department of Transportation

Address: 2015 E. Shields Ave., Suite 100, Fresno, CA 93726

Contact: G. William "Trais" Norris III

Phone: (559) 243-8178

Lead Agency (if different from above): California Department of Transportation (same as above)

Address:

Contact:

Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009061047

Project Title: Island Park Six-Lane Project

Project Location (include county): State Route 99 from PM 30.3/31.6 in Fresno County to PM 0.0/1.6 in Madera County

Project Description:

Widen a 2.9-mile segment of State Route 99 by constructing two lanes in the median from south of Grantland Avenue undercrossing in Fresno County, to north of Avenue 7 overcrossing in Madera County. The work also includes replacing and widening the San Joaquin River Bridge to the west, constructing two biofiltration swales, one infiltration basin, and deeping one existing basin.

This is to advise that the California Department of Transportation has approved the above described project on

☒ Lead Agency or ☐ Responsible Agency

_____ and has made the following determinations regarding the above described project:

(Date)

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: Fresno & Madera County Library; Caltrans District Office, 1352 W. Olive Ave., Fresno, CA; on line: www.dot.ca.gov/dist6/environmental/envdocs/d6/

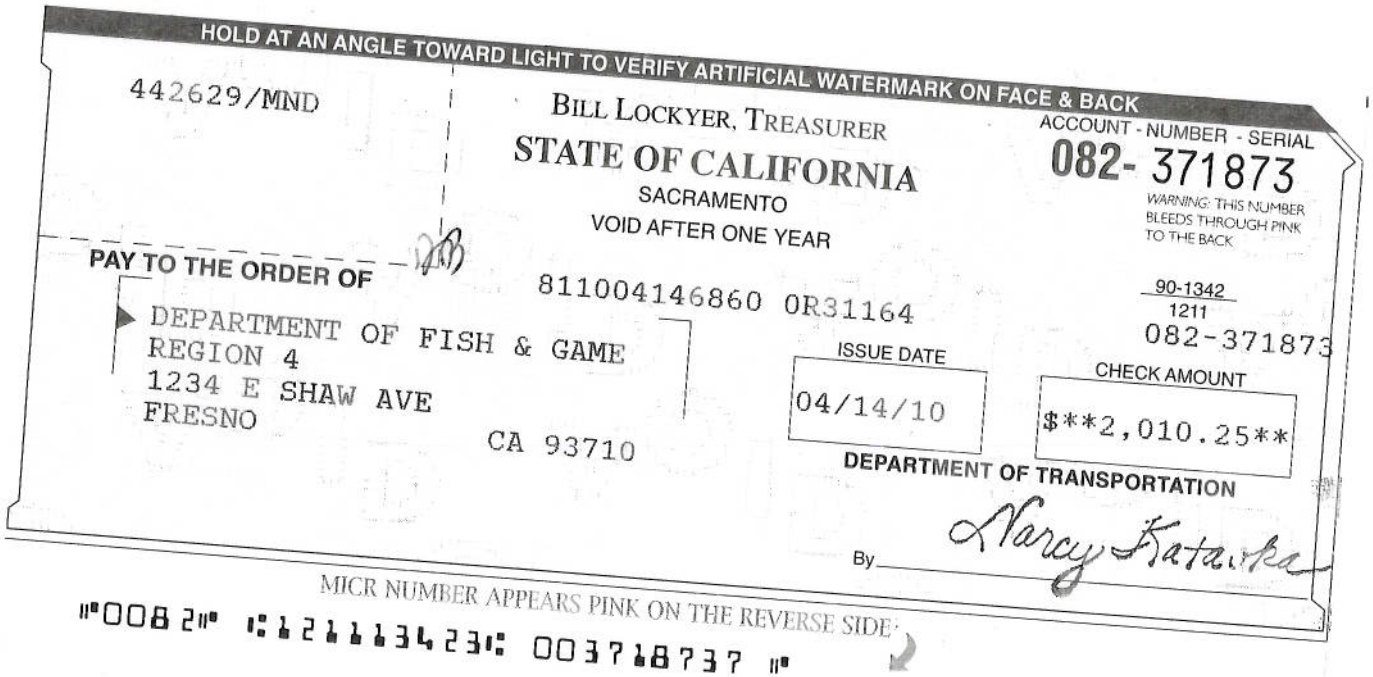
Signature (Public Agency) _____ Title Senior Environmental Planner

Date 04/27/10

Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005



HOLD AT AN ANGLE TOWARD LIGHT TO VERIFY ARTIFICIAL WATERMARK ON FACE & BACK

442629/MND

BILL LOCKYER, TREASURER

STATE OF CALIFORNIA

SACRAMENTO

VOID AFTER ONE YEAR

ACCOUNT - NUMBER - SERIAL

082- 371873

WARNING: THIS NUMBER BLEEDS THROUGH PINK TO THE BACK

90-1342
1211

082-371873

PAY TO THE ORDER OF

811004146860 0R31164

DEPARTMENT OF FISH & GAME
REGION 4
1234 E SHAW AVE
FRESNO CA 93710

ISSUE DATE

04/14/10

CHECK AMOUNT

$**2,010.25**

DEPARTMENT OF TRANSPORTATION

By Nancy Kataoka

MICR NUMBER APPEARS PINK ON THE REVERSE SIDE

⑈0082⑈ ⑆121134230⑆ 00371873 7 ⑈

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☐ County Clerk

County of: _____

Address: _____

From:

Public Agency: Central Valley Flood Protection Board

Address: 3310 El Camino Avenue Room 151, Sacramento, CA 95821

Contact: James Herota, Staff Environmental Scientist

Phone: (916) 574-0651

Lead Agency (if different from above): Caltrans

Address: 2015 E. Shields Avenue, Suite 100, Fresno, CA 93726-5428

Contact: G. William "Trais" Norris, III

Phone: 559-243-8178

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009061047

Project Title: State Route 99 San Joaquin River Crossing

Project Location (include county): North-west of Fresno, along State Route 99 at the crossing of the San Joaquin River, Madera and Fresno Counties

Project Description:

To widen the Highway 99 bridge over the San Joaquin River. The proposed work will consist of removing the existing four-lane, 877-foot long truss bridge and replacing it with a six-lane cast-inplace, post-tensioned concrete box girder bridge.

This is to advise that the Central Valley Flood Protection Board has approved the above described project on

☐ Lead Agency or ☒ Responsible Agency

March 23, 2012 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: 3310 El Camino Avenue Room 151 Sacramento, CA 95821

Signature (Public Agency) Jay S. Punia Title Executive Officer

Date 4/13/2012 Date Received for filing at OPR _____

RECEIVED
APR 13 2012
STATE CLEARING HOUSE

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005