San Benito Route 156 Improvement Project

San Benito County, California
District 5 – SBt – 156 – PM 3.0/R8.2
05-344900

Draft Environmental Impact Report/ Environmental Assessment

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S. Code 327.

July 2007

Caltrans

General Information About This Document

What's in this document?

The California Department of Transportation (Department), as assigned by the Federal Highway Administration, has prepared this draft Environmental Impact Report/Environmental Assessment, which examines the potential environmental impacts of alternatives being considered for the proposed project located in San Benito County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this Draft Environmental Impact Report/Environmental Assessment. Additional copies of this document and the technical studies are available for review at:

  Caltrans district office, 50 Higuera Street, San Luis Obispo, CA 93401
  San Benito County Free Library, 470 5th Street, Hollister, CA 95023, (831) 636-4107
  San Juan Bautista Library, 801 2nd Street, San Juan Bautista, CA 95045, (831) 623-4687

- Attend the public hearings on **September 25, 2007 and September 26, 2007**.
- We welcome your comments. If you have any concerns regarding the proposed project, please attend a public hearing, or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address: Bobi Lyon-Ritter, Branch Chief, California Department of Transportation, 2015 East Shields Avenue, Suite 100, Fresno, CA 93726-5428.
- Submit comments via e-mail to: bobi_lyon_ritter@dot.ca.gov.
- Submit comments by the deadline: **October 10, 2007**.

What happens next?

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration, may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

It should be noted that at a future date, the Federal Highway Administration or another federal agency may publish a notice in the Federal Register, pursuant to 23 U. S. Code Section 139(l), indicating that a final action has been taken on this project by the Federal Highway Administration or another federal agency. If such notice is published, a lawsuit or other legal claim will be barred unless it is filed within 180 days after the date of publication of the notice (or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed). If no notice is published, then the lawsuit or claim can be filed as long as the periods of time provided by other federal laws that govern claims are met.

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: Bobi Lyon-Ritter, 2015 East Shields Avenue, Suite 100, Fresno, CA 93726; phone (559) 243-8178 Voice, or use the California Relay Service TTY number, 1(800) 735-2929.

Widen State Route 156 from The Alameda
in San Juan Bautista to 0.2 mile east of Fourth Street (Business Route 156) in San Benito County

DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S. Code 4332(2)(C) and 23 U.S. Code 327

THE STATE OF CALIFORNIA
Department of Transportation

8/10/07
Date of Approval

Richard Krumholz
District 05 Director
California Department of Transportation

Summary

Overview of Project Area

The San Benito Route 156 Improvement Project proposes improvements to State Route 156 between the cities of San Juan Bautista and Hollister in San Benito County. The 5.2-mile project begins within the eastern city limits of San Juan Bautista at The Alameda and ends west of Hollister, approximately 0.2 miles east of Fourth Street (Business Route 156) in San Benito County.

State Route 156 crosses the northern portion of San Benito County. It begins at U.S. 101 west of San Juan Bautista and passes through the cities of San Juan Bautista and Hollister, then continues to the San Benito/Santa Clara County line and connects with State Route 152 (See Figure 1-1).

State Route 156 is the only route that links the two incorporated cities in San Benito County: Hollister and San Juan Bautista. In Hollister, the State Route 156 Bypass skirts north of the city limits, while Business Route 156 passes through downtown Hollister. State Route 156 is currently a two-lane conventional highway between The Alameda (one of four surface roads in San Juan Bautista that connects to State Route 156) and its connection to the Hollister Bypass east of Union Road. West of the proposed project, State Route 156 is a four-lane expressway until it merges with U.S. 101. East of the proposed project, State Route 156 is a two-lane expressway that intersects with State Route 25 and ends at State Route 152 in Santa Clara County.

Purpose and Need

The purpose of the project is to improve route continuity, reduce congestion, and increase safety.

The project is needed because the two-lane conventional highway between the existing expressways creates a conflict between slow-moving trucks and farm equipment and fast-moving private vehicles, which results in congestion and a lower Level of Service. In addition to reducing congestion, a controlled access expressway or conventional highway with greater capacity would decrease the potential for traffic accidents and provide drivers a larger recovery zone.

Proposed Action

The California Department of Transportation (Caltrans) proposes to widen State Route 156 in San Benito County from two lanes to four lanes from The Alameda in

San Juan Bautista to the Hollister Bypass, approximately 0.2 mile east of Fourth Street (Business Route 156) in San Benito County (See Figure 1-2).

Four alternatives are under consideration, including the No-Build Alternative. Maps showing Alternatives 2, 4A, and 6 are at the end of Chapter 1. All the Build Alternatives proposed would:

- Widen the bridge at San Juan Creek
- Raise sections of the highway up to five feet to prevent highway flooding
- Construct side drainage/detention channels and cross-culverts to maintain the existing drainage pattern
- Modify the existing compound curve (a curve with varying radii) near Union Road/Mitchell Road to a constant radius curve
- Shift the new alignment to the south between Bixby and Flint roads to avoid the former San Justo School, determined eligible as a historic structure.

In addition, an Advisory Design Exception is under consideration for all the Build Alternatives, but has not been approved yet. The design exceptions include the following:

- Decreasing the median width for all Build Alternatives from 62 to 30 feet from The Alameda to Breen Road/Mission Vineyard Road (PM 3.0/3.8), within the San Juan Bautista city limits
- Decreasing the median width for Alternatives 2 and 6 from 62 to 46 feet from Mission Vineyard Road (PM 3.8) to 0.2 miles east of Fourth Street/Business Route 156 (PM R8.2)
- Decreasing the median width for Alternative 4A for the expressway segment portion from 62 to 46 feet from Union Road/Mitchell Road (PM 7.1) to 0.2 miles east of Fourth Street/Business Route 156 (PM R8.2)

The design exceptions, if approved, would decrease the amount of right-of-way needed for the project, reduce environmental impacts, and be consistent with the adjacent segments of State Route 156.

Other alternatives considered but rejected are addressed in Section 1.3.4, Alternatives Considered but Eliminated from Further Discussion.

Alternative 2 would construct a four-lane divided expressway south of the existing State Route 156 with two-lane frontage roads north and south of the expressway. The existing State Route 156 would be used in place as the northern frontage road and

would connect to Cagney Road on the west and to Mitchell Road on the east. The frontage road on the south would connect to Mission Vineyard Road on the west and to San Juan Hollister Road on the east creating a new four-way intersection with Union Road. An intersection without traffic signals would be constructed at State Route 156 with Cagney Road and Mission Vineyard Road. Total construction costs (2007 estimate) and right-of-way costs (2009 estimate) for Alternative 2 are $54,673,000. Total right-of-way acquisition would be 206 acres.

Alternative 4A would construct a four-lane conventional highway/expressway south of the existing State Route 156. No frontage roads would be constructed, but the existing State Route 156 would be used where needed to maintain access. Left-turn lanes would be constructed at Cagney Road/Mission Vineyard Road, Lucy Brown Lane, Bixby Road, Flint Road, and the Union Road and Mitchell Road intersection. Total construction costs (2007 estimate) and right-of-way costs (2009 estimate) for Alternative 4A are $41,513,000. Total right-of-way acquisition would be 128 acres.

Alternative 6 would construct a four-lane expressway south of the existing State Route 156 and use the existing State Route 156 as the northern frontage road. It would have two lanes for eastbound and westbound traffic and would connect Cagney Road on the west to Mitchell Road on the east. The existing access to the properties south of the highway would be consolidated via a private access easement to the State Route 156/Bixby Road intersection. The State Route 156/Bixby Road intersection would have signals. The frontage road shifts to the north before it intersects with Bixby Road to allow adequate turning lane distance between the two intersections for cars waiting to turn. Total construction costs (2007 estimate) and right-of-way costs (2009 estimate) for this alternative are $52,695,000. Total right-of-way acquisition would be 206 acres.

The No-Build Alternative would keep the roadway as it is—a two-lane conventional highway. The No-Build Alternative does not address the proposed project's Purpose and Need.

Joint California Environmental Quality Act/National Environmental Policy Act Document

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act and the

National Environmental Policy Act. Caltrans is the lead agency under the California Environmental Quality Act. In addition, the Federal Highway Administration's responsibility for environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327.

Some impacts determined to be significant under the California Environmental Quality Act may not lead to a determination of significance under the National Environmental Policy Act. Because the National Environmental Policy Act is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for the National Environmental Policy Act. One of the most commonly seen joint document types is an Environmental Impact Report/Environmental Assessment.

Following receipt of public comments on the Draft Environmental Impact Report/Environmental Assessment and circulation of the Final Environmental Impact Report/Environmental Assessment, Caltrans will be required to take actions regarding the environmental document and will determine whether to certify the Environmental Impact Report and issue Findings and a Statement of Overriding Considerations under the California Environmental Quality Act. Caltrans will also decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement under the National Environmental Policy Act.

A summary of potential project impacts to the human, physical, and biological environment is presented in Table S.1.

Table S.1 Summary of Major Potential Impacts from Alternatives

Alternative	HUMAN ENVIRONMENT										
	Land Use - Is the project consistent with the General Plans of:			Farmlands/ Timberland		Community Character/ Cohesion	Relocation – Will the project result in any displacements of:			Traffic and Transportation/ Pedestrian and Bicycle Facilities	Visual/Aesthetics	Cultural Resources
	City of San Juan Bautista	City of Hollister	County of San Benito	Total (acres)	Prime/ Unique (acres)		Businesses	Housing	Utilities			
2	Yes	Yes	Yes	206	206	Not expected to result in any disruption or isolation of a community	None	No residential housing would be displaced. Displaces one non-residential building	The existing State Route 156 would remain in place; thereby, minimizing the relocation of the following utilities: PG&E - aerial electric lines and an underground high-pressure gas line AT&T - aerial lines, fiber optic, and copper lines San Benito Water District - water line Charter Communications - cable TV aerial lines	Levels of Service would be improved for local and through traffic Provides traffic, pedestrian, and bicycle access with the construction of frontage roads north and south of State Route 156	May construct a sound wall adjacent to Mission Farm RV Park Construction of a sound wall may require the removal of trees Raises the roadway (profile) up to five feet to prevent flooding Increases the cross-section (width) of the highway Highway drivers would see the rear elevation of the former San Justo School rather than the front	The project would have no effect on any historic properties.
4A	Yes	Yes	Yes	128	128	Not expected to result in any disruption or isolation of a community	None	No residential housing would be displaced. Displaces one non-residential building	PG&E - aerial electric lines and an underground high-pressure gas line AT&T - aerial lines, fiber optic, and copper lines San Benito Water District - water line Charter Communications - cable TV aerial lines	Levels of Service would be improved for local and through traffic Bicyclists and the occasional pedestrian would benefit from wider shoulders	May construct a sound wall adjacent to Mission Farm RV Park Construction of a sound wall may require the removal of trees Raises the roadway (profile) up to five feet to prevent flooding Increases the cross-section (width) of the highway Highway drivers would see the rear elevation of the former San Justo School rather than the front	The project would have no effect on any historic properties.
6	Yes	Yes	Yes	206	206	Not expected to result in any disruption or isolation of a community	None	No residential housing would be displaced. Displaces one unoccupied building	The existing State Route 156 would remain in place; thereby, minimizing the relocation of the following utilities: PG&E - aerial electric lines and an underground high-pressure gas line AT&T - aerial lines, fiber optic, and copper lines San Benito Water District - water line Charter Communications - cable TV aerial lines	Levels of Service would be improved for local and through traffic Provides traffic, pedestrian, and bicycle access with the construction of a frontage road north of State Route 156	May construct a sound wall adjacent to Mission Farm RV Park Construction of a sound wall may require the removal of trees Raises the roadway (profile) up to 5 feet to prevent flooding Increases the cross-section (width) of the highway Highway drivers would see the rear elevation of the San Justo School rather than the front	The project would have no effect on any historic properties.
No-Build	No	No	No	None	None	None	None	None	None	No improvements made	No changes	No changes

Alternative	PHYSICAL ENVIRONMENT			BIOLOGICAL ENVIRONMENT			Construction
	Water Quality and Storm Water Runoff	Noise	Hydrology and Floodplain	Wetlands and other Waters	Plant Species	Threatened and Endangered Species	
2	Water-resistant surface area would increase with this alternative Additional drainage ditches would be constructed parallel to existing ditches to channel any additional storm water Storm water originating next to the highway would be channeled through culverts to maintain the current flow patterns	Predicted noise level approaches or exceeds the Noise Abatement Criteria for outdoor residential use at six receptors	Would not constitute a significant floodplain encroachment Maintains existing drainage patterns Separates onsite and offsite drainage Requires new cross culverts between Mission Vineyard Road and Lucy Brown Lane Raises the highway profile above floodwater, stores all highway runoff in side ditches, and disposes all highway drainage via a new drainage collection system	Constructs new drainage ditches requiring placement of fill into Waters of the U.S., affecting 0.01 acre permanently and 0.23 acre temporarily	Would not have an impact to any special-status plant species or natural communities of concern	Any California red-legged frog found during construction would require relocation. Capture and relocation increases the risk of death or injury to this species. No permanent net loss of California red-legged frog habitat	Potential for: Temporary increase in air emissions from construction equipment, application of asphalt products, and construction grading Temporary traffic delays or detours Temporary increase in noise from construction equipment Temporary storm water runoff Temporary impact to California red-legged frog and its habitat Temporary impact to California tiger salamander and its habitat
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No-Build	Periodic flooding of the highway would continue to occur.	No changes	Periodic flooding of the highway would continue to occur.	No changes	No changes	No changes	No changes

Coordination with Other Agencies

Environmental compliance for the proposed undertaking has included consultation with four federal and state agencies. The agencies, the permits they issue, and the status of those permits are presented in Table S.2.

Table S.2 Permits and Approvals Needed

Agency	Permit/Approval	Status
United States Fish and Wildlife Service	Section 7 Consultation for special-status species. Review and Comment on 404 Permit	Biological Assessment would be forwarded to U.S. Fish and Wildlife Service after preferred alternative is chosen
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States	Application for Section 404 permit anticipated after final environmental document distribution
Regional Water Quality Control Board	Section 401 certification	Application for Section 401 permit anticipated after final environmental document distribution
California Department of Fish and Game	Section 1602 Streambed Alteration Agreement	Application for Section 1602 permit anticipated after final environmental document distribution

Table of Contents

List of Figures

List of Tables

List of Abbreviated Terms

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
PM	post mile
PM_{10}	particulate matter under 10 microns in diameter
RV	recreational vehicle

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to widen from two lanes to four lanes and realign State Route 156 in San Benito County (See Figure 1-1) from "The Alameda" in San Juan Bautista to the Hollister Bypass, approximately 0.2 mile east of Fourth Street (Business Route 156) in San Benito County (see Figure 1-2). This existing 5.2-mile segment of State Route 156 is a two-lane conventional highway connecting with a four-lane expressway to the west and a two-lane expressway to the east. The highway serves slow-moving farm and truck traffic as well as faster-moving local and commuter traffic, often in congested conditions.

Access to properties bordering State Route 156 is now allowed for the entire length of the project. Local streets with connections to State Route 156 within the project limits include Breen Road, Mission Vineyard Road, Lucy Brown Lane, Bixby Road, Flint Road, Union Road, and Mitchell Road. Several unpaved, unnamed farm roads also connect to State Route 156 in the project area. The primary purpose of State Route 156 is to serve interregional traffic, but regional, local, and commuter trips dominate in Hollister.

The proposed project is included in the Council of San Benito County Governments' Draft 2005 Regional Transportation Plan under Short-Term Improvements (Constrained Projects), and is currently programmed in the 2004 State Transportation Improvement Program for project development support only. It was ranked number one for the 1998 State Transportation Improvement Program (STIP) Candidate List for San Benito County. Funding for the State's share of this project would come from the New Programming Interregional Improvement Program (IIP), New Programming Regional Improvement Program (RIP), and local traffic impact fees.

In October 2006, the San Benito County Board of Supervisors unanimously adopted and passed a resolution identifying their three top transportation priorities: widening Highways 25, 152, and 156 to four lanes. The San Benito Council of Governments passed a similar resolution identifying their three top transportation priorities: widening State Routes 25, 152, and 156 to four lanes.

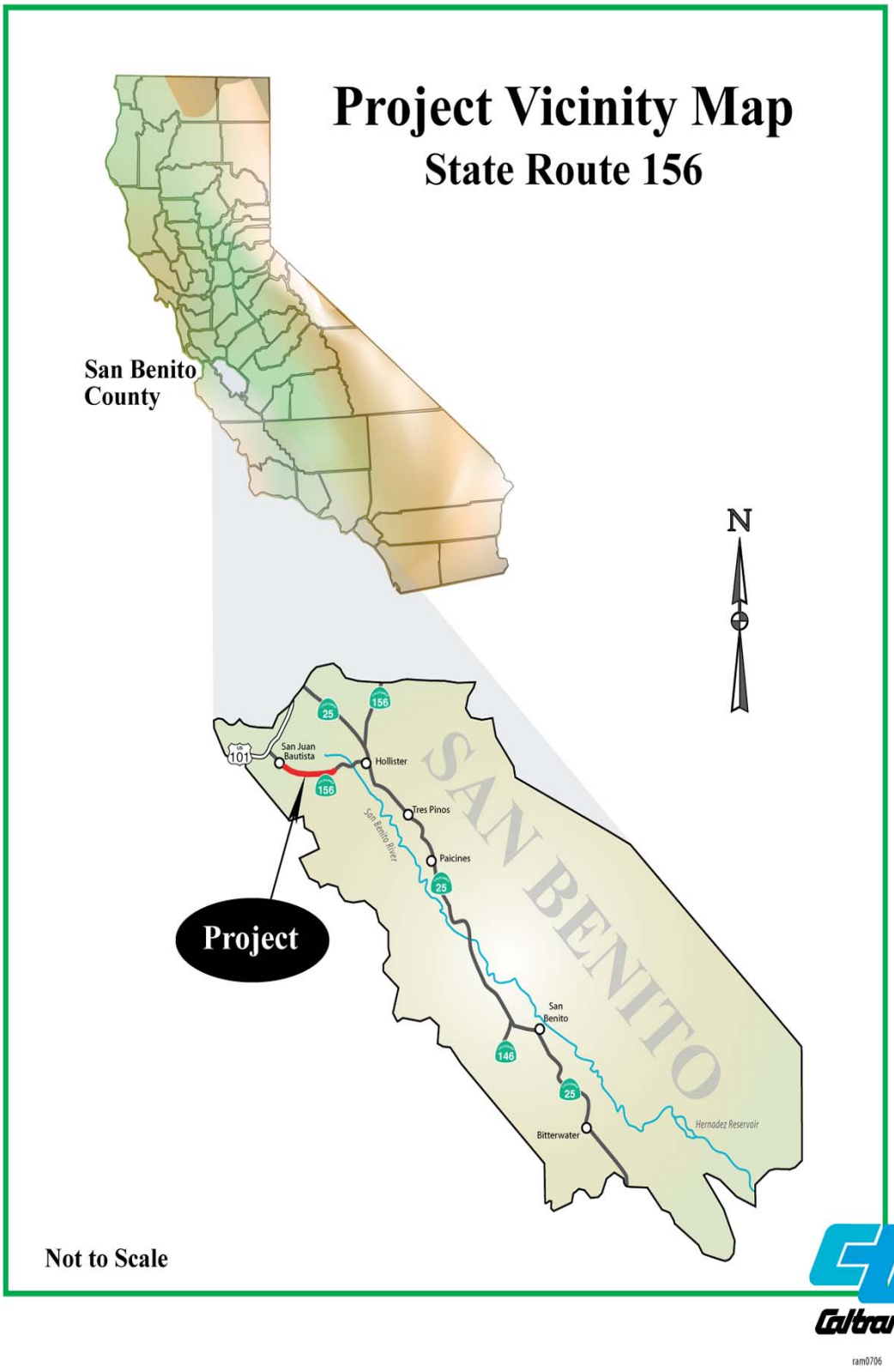


Figure 1-1 Project Vicinity Map

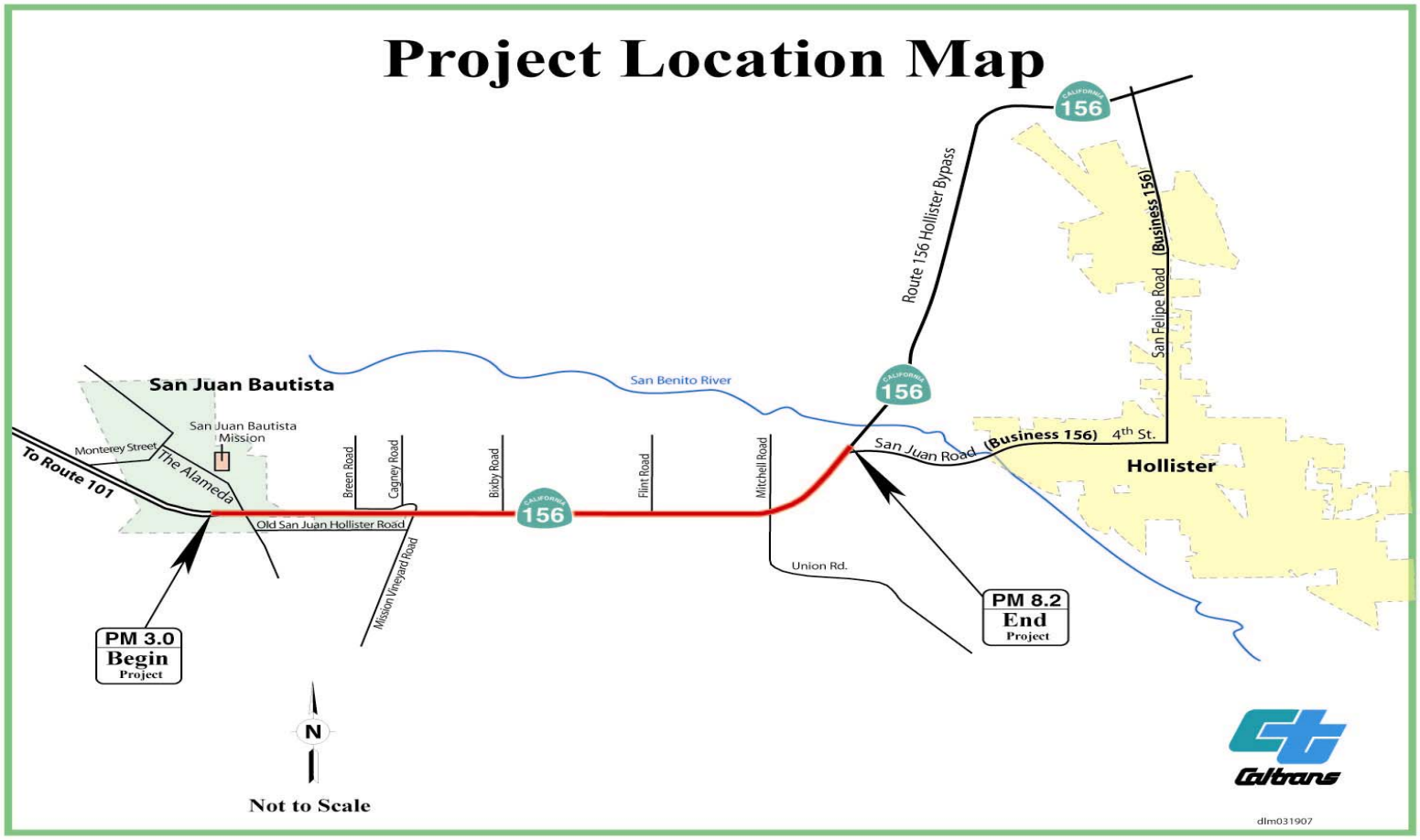


Figure 1-2 Project Location Map

1.2 Purpose and Need

The Purpose and Need Section of this document discusses the reasons for the proposed project and provides structure for the development of alternatives. In the alternative selection process, the alternatives are evaluated and compared on how well they meet the Purpose and Need, as well as the potential environmental and economic costs.

1.2.1 Purpose

The purpose of the proposed project is to:

- Reduce existing congestion and provide for future traffic needs
- Improve safety
- Improve route continuity

1.2.2 Need

Serving as a bedroom community for the Bay Area since about 1990, San Benito County, especially in the project area, has been growing rapidly. According to the U.S. Census Bureau, between 1990 and 2000, San Benito County's population increased by 45.1 percent, with most of the county's population growth in or near the two incorporated cities of Hollister and San Juan Bautista. (Between 2003 and 2004, however, population growth in the county slowed down and increased by only 1.4 percent.)

Economic growth in the neighboring county of Santa Clara has created pressure for residential growth in San Benito County where housing is more affordable. As a result, San Benito County's population growth rate has outpaced the State's and the proportion of employed persons commuting from San Benito County to Santa Clara County each day (and to a lesser extent to Monterey County) has grown. According to the U.S. Census Bureau, almost half of the residents in San Benito County, including its two incorporated cities, commute outside San Benito County for employment. The number of registered vehicles and registered drivers has also grown accordingly. This growth trend has increased demands on the regional transportation system.

Despite this growth, the county generally remains a low-density, rural, and agricultural area. Approximately 97 percent of the county is unincorporated land, with 90 percent being used as farmland, rangelands, forest, and public open space.

This segment of State Route 156 is the only link between Hollister and San Juan Bautista. Besides local commuter traffic, commercial trucks and agricultural equipment associated with the farms in the San Juan Valley, and tourists traveling between the San Joaquin Valley and coastal destinations use this segment of the highway. At peak hours traffic is heavy, resulting in congestion and conflicts between commuters and slower-moving agricultural traffic.

Additional safety concerns include:

- Flooding
- The lack of passing opportunities
- A compound curve at Union Road/Mitchell Road

The proposed project runs through farmland that has been leveled to improve cultivation. The leveling of farmland tends to increase runoff from irrigation and storm water onto the highway, which results in periodic flooding. This segment of the two-lane highway offers little opportunity for passing when traffic is heavy, which promotes conflict between slow- and fast-moving traffic. The curve at the intersection of State Route 156 and Union Road/Mitchell Road is constructed with varying or uneven radii that is more difficult for drivers to negotiate than a single radius, and no longer meets the standards set forth in the Caltrans Highway Design Manual.

The need for the proposed project is based on the following:

- Increasing congestion
- Lack of passing opportunities when slower trucks and agricultural vehicles conflict with passenger vehicles
- The existing non-standard compound curve
- Lack of continuous expressway on the route
- A history of flooding along the route

1.2.2.1 Congestion

Traffic data was collected during a mid-week morning and afternoon/evening peak hour during the month of May 2005. Caltrans completed a Traffic Analysis Report for the proposed project in July 2006. Analysis was performed for the existing conditions (2005), as well as for the construction year (2011) and design year (2030) conditions with and without a project.

The average annual daily traffic (AADT) count is the average number of vehicles that pass a given point within a 24-hour period. The existing highway within the project limits is designed to handle a maximum of 20,000 vehicles each day.

Route capacity is measured in both traffic volume and quality of traffic flow. Level of Service (LOS) ranges from A to F, with a Level of Service A indicating free-flowing traffic and a Level of Service F indicating gridlock and stop-and-go conditions (Figure 1-3).

During the peak traffic hour, a Level of Service C is considered satisfactory for rural areas and Level of Service D is considered satisfactory for urban areas. Since 1997, peak hour traffic on State Route 156 within the project area has been at Level of Service E, but within only four years, in 2011, peak-hour traffic will be at Level of Service F.

Table 1.1 shows the average annual daily traffic counts and the Level of Service within the project area for 2005 (existing conditions). Estimated traffic and Level of Service without the project are also shown for 2011 (construction year) and 2030 (future conditions). Truck traffic averages 8 percent of the total traffic volume.

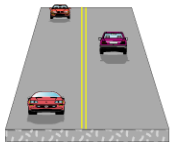
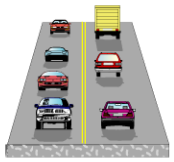
Table 1.1 Average Annual Daily Traffic and Level of Service without Project

Year	Average Annual Daily Traffic (number of Vehicles)		Level of Service
	Eastbound	Westbound	
2005	14,820	9,880	E
2011	15,908	10,605	F
2030	19,355	12,903	F

Source: Caltrans Traffic Operations

LEVELS OF SERVICE

for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **No delays**
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

Figure 1-3 Levels of Sevice for Two-Lane Highways

1.2.2.2 Safety

Compound Curve

The lane width, shoulder width, and slope of the existing highway meet Caltrans design standards, but the curve at the intersection of State Route 156 and Union Road/Mitchell Road does not. The curve is considered a compound curve, or a curve with varying, or uneven, radii.

Current Caltrans highway design standards avoid compound curves because drivers who have adjusted to the first curve could overcompensate on the second curve if it has a smaller radius than the first curve. By realigning a compound curve into one consistent curve, the frequency and severity of collisions will be reduced.

Continuous Expressway

State Route 156 is currently a two-lane conventional highway between The Alameda and its connection to the Hollister Bypass east of Union Road. West of the proposed project, State Route 156 is a four-lane expressway and east of the proposed project, State Route 156 is a two-lane expressway. Build Alternatives 2 and 6 would convert the existing segment of conventional highway between the existing expressways to an expressway, thus creating a continuous expressway of approximately 15 miles. State Route 156 would remain a conventional highway with Build Alternative 4A, but the additional eastbound and westbound lanes would help reduce traffic conflicts along the route.

Conflicts with Slow-Moving Traffic

Table 1.2 shows the number of actual accidents that occurred on State Route 156 between The Alameda and Fourth Street/Business Route 156 (post miles 3.0 to 8.2) from July 1, 2003 to June 30, 2006. According to the California Highway Patrol, the types of accidents typical of crowded highways are rear-end collisions, sideswipes, and failures to yield. Over half of the accidents shown in Table 1.2 were rear-end collisions (58.8 percent) and 6.3 percent were sideswipes. Rear-end collisions indicate speed differences; i.e., fast versus slower-moving traffic. The higher incidence of rear-end collisions supports the need to reduce conflicts between faster–moving interregional traffic and slower-moving local commuter and farm equipment.

The actual accident rates along State Route 156 within the project limits are lower than the state average for similar highways except at the Lucy Brown intersection. The actual accident rate for that intersection is 0.10 percent higher than the State average.

Table 1.2 Accidents within the Project Area

(Between July 1, 2003 and June 30, 2006)

Location Description	Number of Accidents				Accident Rate					
					Actual			State Average		
	Total	Fatal	Injury	Fatal & Injury	Fatal	Fatal & Injury	Total	Fatal	Fatal & Injury	Total
San Benito Route156 Project area PM 3.0/8.2	102	1	31	32	0.007	.23	.72	0.034	.40	.82
The Alameda Post mile 3.02	4	0	1	1	0.000	.03	.13	0.003	.23	.58
Mission Vineyard Post mile 3.83	1	0	0	0	0.000	.00	.04	0.008	.16	.33
Lucy Brown Lane Post mile 4.41	9	0	3	3	0.000	.11	.32	0.004	.10	.22
Bixby Road Post mile 5.42	3	0	0	0	0.000	.00	.11	0.004	.10	.22
Flint Road Post mile 6.43	4	0	2	2	0.000	.07	.14	0.004	.10	.22
Mitchell Road/ Union Road Post mile 7.25	8	0	4	4	0.000	.13	.26	0.008	.16	.33
Fourth Street Business 156 PM 8.0	12	0	2	2	0.000	.08	.46	0.001	.19	.50

Source: Caltrans Traffic Operations; Total number of accidents includes property damage only accidents.

Flooding

The highway has a long history of flooding, particularly between Mission Vineyard Road and Lucy Brown Lane. The 27-square-mile watershed of San Juan Creek drains across this particular section of State Route 156. In the last several years, Caltrans Hydraulics and Design engineers conducted studies and investigations to define and quantify the drainage problems within the project area. Meetings were conducted with members of San Benito Council of Government, the San Juan Bautista city manager, the president of the local farm bureau, the California Highway Patrol captain, and the San Benito County Water District manager.

Several field investigations were made along with the above meetings. Caltrans engineers obtained from the San Benito County Water District manager copies of the San Juan Valley Drainage Improvement Draft Report and as-built drawings of water lines and utilities along Highway 156.

Caltrans Hydraulics prepared a hydraulic study on March 20, 2000, conducted an investigation of local flooding problems at the Lucy Brown intersection with

Highway 156 on August 17, 2000, and calculated the flows generated from different drainage areas along both sides of the highway.

There are no significant flood control facilities within the influence of this project, and State Route 156 is located on the flat San Juan Valley floor where the stream channels have limited capacity. Often these stream channels are choked with vegetation, causing the waters to exceed channel capacities during major floods. The overflow generally spreads out as slow-moving shallow flooding. Runoff and flooding occur behind irrigation canal levees and road embankments that cross the area.

Further complicating area drainage is local farming and irrigation practice. The area has been re-graded without consideration for the overall drainage patterns. The natural watershed creek beds have also been ditched, bermed, and/or obliterated. Farmers have channeled the water around their properties to maximize the amount of available land. When it rains, water is rerouted to the property lines and eventually ends up on the local county roads and ultimately the State highway. Roadside ditches, intended to hold highway runoff, have become drainage canals carrying offsite storm runoff to San Juan Creek.

Prior to Caltrans studies, San Benito County Water District performed a study to install a system to drain floodwater directly into the San Benito River, but the project was not implemented.

In a meeting in February 2000, the San Benito County Water District confirmed that the existing creeks/channels are grossly undersized and overwhelmed during major storm events. In the past, the farmers have attempted to maintain the creek bottoms, but have encountered problems with the U.S. Fish & Wildlife Service. The worst area of flooding is the creek area north of San Juan Bautista. In comparison, the existing bridge crossing at San Juan Creek appears adequate, although Caltrans maintenance work has made the streambed lower than the upstream creek, which results in a tendency for water to backup at the highway.

All Build Alternatives would elevate the current profile of the highway and provide drainage systems for storm water runoff. The elevated roadway and additional drainage capacity would prevent driving hazards, such as pooling and flooding.

1.3 Project Alternatives

This section describes the proposed action and the design alternatives that were developed by an interdisciplinary team to achieve the project purpose while avoiding or minimizing environmental impacts. Several criteria were taken into consideration when evaluating the various alternatives for the proposed project, including project Purpose and Need, cost, congestion relief, improved safety, farmland impacts, and specific environmental impacts; such as Section 4(f) resources.

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S. Code 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible alternative to using that land and
- the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

The proposed project has potential to affect six eligible historic properties (See Section 2.1.8 Cultural Resources).

Seven Build Alternatives were considered and withdrawn from further consideration and are discussed in Section 1.3.4. Three Build Alternatives, (Alternatives 2, 4A, and 6), and the No-Build Alternative remain under consideration.

1.3.1 Build Alternatives

Common Design Features of the Build Alternatives

All Build Alternatives under consideration would:

- Widen the existing two-lane highway to a four-lane divided highway between The Alameda and the Hollister Bypass east of Union Road

- Widen the bridge at San Juan Creek
- Raise sections of the highway up to five feet to prevent highway flooding
- Construct side drainage/detention channels and cross-culverts to maintain the existing drainage pattern
- Modify the existing compound curve (a curve with varying radii) near Union Road/Mitchell Road to a constant radius curve
- Shift the new alignment to the south between Bixby and Flint Roads to avoid the former San Justo School, determined eligible as a historic structure

In addition, design exceptions are under consideration for all the Build Alternatives, but have not been approved yet. The design exceptions include the following:

- Decreasing the median width for all Build Alternatives from 62 to 30 feet from The Alameda to Breen Road/Mission Vineyard Road (PM 3.0/3.8), within the San Juan Bautista city limits
- Decreasing the median width for Alternatives 2 and 6 from 62 to 46 feet from Mission Vineyard Road (PM 3.8) to 0.2 miles east of Fourth Street/Business Route 156 (PM R8.2)
- Decreasing the median width for Alternative 4A for the expressway segment portion from 62 to 46 feet from Union Road/Mitchell Road (PM 7.1) to 0.2 miles east of Fourth Street/Business Route 156 (PM R8.2)

The reduced median width proposal is consistent with the adjacent segments of State Route 156. To the west, State Route 156 is a four-lane expressway with a 22-foot median width, and the segment to the east is a two-lane expressway on a four-lane expressway right-of-way with a planned 46-foot median width.

The design exceptions, if approved, would decrease the amount of right-of-way needed for the project, eliminate relocation of homes or businesses, minimize or eliminate impacts to the redwood trees south of the highway, and reduce farmland conversion (See Section 2.1.3, Farmland).

1.3.1.1 Alternative 2

Alternative 2 would construct a four-lane divided expressway south of the existing State Route 156 with a frontage road north and south of the expressway. The frontage roads would have two lanes for eastbound and westbound traffic. Existing State Route 156 would be used in place as the northern frontage road, which would connect to Cagney Road on the west and to Mitchell Road on the east. The frontage road on

the south would be constructed on new alignment and connect to Mission Vineyard Road on the west and to San Juan Hollister Road on the east, intersecting Union Road. The new alignment would shift south near Flint Road to avoid the former San Justo School. An intersection without traffic signals would be constructed at Cagney Road/Mission Vineyard Road. Total construction costs (2007 estimates) and right-of-way costs (2009 estimates) for this alternative are $52,596,000. Total right-of-way acquisition is 206 acres.

1.3.1.2 Alternative 4A

Alternative 4A would construct a four-lane conventional highway/expressway south of the existing State Route 156 with portions of the existing State Route 156 used for westbound traffic from The Alameda to Mission Vineyard, and from Union Road to the end of the project. Near Flint Road, where the proposed highway shifts south to avoid the former San Justo School, the existing State Route 156 would be used for access. Left-turn lanes would be constructed at Cagney Road/Mission Vineyard Road, Lucy Brown Lane, Bixby Road, Flint Road, and the Union Road/Mitchell Road intersection. Total construction costs (2007 estimates) and right-of-way costs (2009 estimates) for this alternative are $40,278,000. Total right-of-way acquisition is 128 acres.

1.3.1.3 Alternative 6

Alternative 6 would construct a four-lane expressway south of the existing State Route 156 with a frontage road north of the new alignment. This alternative proposes to use the existing State Route 156 in place as a frontage road. The existing access to the property south of the highway would remain as is. The frontage road on the north would have two lanes for eastbound and westbound traffic and would connect Cagney Road on the west to Mitchell Road on the east. The frontage road would shift north at Bixby Road to provide enough distance between the two nearest intersections. The new alignment would shift south near Flint Road to avoid the former San Justo School. This alternative would include an intersection with signals at Bixby Road. Total construction costs (2007 estimates) and right-of-way costs (2009 estimates) for this alternative are $52,579,000. Total right-of-way acquisition is 206 acres.

1.3.2 No-Build Alternative

The No-Build Alternative provides a baseline for consideration of other alternatives and may be preferred if other alternatives have significant impacts on the

environment, do not serve the stated Purpose and Need, or are not economically feasible.

The No-Build Alternative would keep the roadway as is, a two-lane conventional highway. Routine maintenance would continue. Future operational and safety improvements may be considered. Any future improvements would require a separate design process and may require additional environmental studies. In addition, the No-Build Alternative would not meet the Purpose and Need of the proposed project because it would not reduce existing congestion, provide for future traffic needs, improve safety, improve route continuity, correct non-standard features (curves), or improve highway drainage.

1.3.3 Comparison of Alternatives

Table 1.3 compares the three Build Alternatives and the No-Build Alternative. Criteria for evaluating alternatives include project Purpose and Need issues, project cost, and potential environmental effects of the proposed project. The three Build Alternatives are similar for many of the evaluation criteria. Any of the Build Alternatives would relieve traffic congestion and increase safety by providing additional travel lanes. Route continuity would be enhanced. The conflict between inter-regional travelers and slower-moving traffic would be reduced with the construction of additional travel lanes, wider shoulders, and frontage roads.

The comparison in Table 1.3 shows that Alternative 2 would provide the greatest congestion reduction, but would also have the most potential effect on the natural and man-made environment. Alternative 6, similar to Alternative 2, would leave the existing State Route 156 in place as a frontage road north of the roadway. Alternative 6 provides less congestion reduction than Alternative 2, but has fewer potential effects on the natural environment and eliminates the relocation of most of the utilities along the existing highway. Alternative 4A would correct the roadway and provide some congestion relief. Alternative 4A also has the least potential for natural environmental effects, but would require the relocation of utilities like Alternative 2, because the new roadway would be constructed south of the existing State Route 156. Alternative 4A does the least to meet future traffic needs.

Table 1.3 Comparison of Alternatives

Evaluation Criteria	Alternative 2	Alternative 4A	Alternative 6	No-Build Alternative
Reduces Congestion	Provides the greatest congestion reduction	Provides the least reduction in congestion	Provides a greater reduction in congestion than Alternative 4A	Provides no reduction in congestion
Provides for Future Demand	Alternatives 2 and 6 would be the most effective in meeting future demand	Less effective in meeting future demand than Alternatives 2 and 6	Alternatives 2 and 6 would be the most effective in meeting future demand	Does not accommodate future demand.
Improves Safety	Alternatives 2 and 6 would provide the greatest improvement to safety	Provides the least improvement to safety	Alternatives 2 and 6 would provide the greatest improvement to safety	Provides no improvement in safety
Reduces Traffic Conflicts	Provides the greatest minimization of conflicts	Provides the least minimization of conflicts	Provides a greater minimization of conflicts than Alternative 4A	Provides no minimization of conflicts
Provides Route Continuity	Alternatives 2 and 6 create a continuous expressway between Routes 101 and 25	Interim improvement to route continuity	Alternatives 2 and 6 create a continuous expressway between Routes 101 and 25	No Improvement of route continuity
Corrects Roadway Deficiencies	Raises the profile, enhances drainage system, and corrects curve	Raises the profile, enhances drainage system, and corrects curve	Raises the profile, enhances drainage system, and corrects curve	Does not correct highway deficiencies
Minimizes Environmental Impact	Converts 206 acres of farmland	Requires 128 acres, the least amount of farmland	Converts 206 acres of farmland	No effect on the environment
Cost	$54,673,000	$41,513,000	$52,695,000	Maintenance and repair costs only

1.3.4 Alternatives Considered but Eliminated from Further Discussion

Ten Build Alternatives were developed and studied by the Project Development Team (comprised of Caltrans personnel from different functional branches, the Federal Highway Administration, local and state agency representatives, and other stakeholders). Seven of these alternatives were rejected because they did not reduce environmental impacts or they were not feasible to construct.

1.3.4.1 Alternative 1

Alternative 1 proposed a four-lane expressway with two-lane frontage roads, north and south, with the mainline alignment passing directly through the former San Justo School, a property eligible for the National Register of Historic Places. Moving the former school building was considered but rejected due to adverse effects under

Section 106 of the 1966 National Historic Preservation Act and impacts under Section 4(f) of the 1966 Department of Transportation Act; the potential to damage the building; and the high costs for right-of-way acquisition. In addition, Nyland Road was to be extended as part of the new frontage road directly in front of the John Breen Adobe, also a historic property (See Section 2.13, Cultural Resources), constituting a potential adverse effect to that historic property. This alternative was dropped from further study in 2001 because it did not reduce environmental impacts.

1.3.4.2 Alternative 2A

This alternative proposed a four-lane expressway with two-lane frontage roads north and south, with the mainline alignment similar to Alternative 2 but shifting north of the former San Justo School. While this alternative avoided the former San Justo School building, this alignment potentially displaced three homes and a business. Right-of-way was required from approximately 27 parcels. This alternative was withdrawn in August 2003 because it did not reduce environmental impacts.

1.3.4.3 Alternative 3

This alternative proposed a four-lane highway/expressway with no frontage roads. The mainline passed directly through the former San Justo School building. Moving the former school building was also proposed and rejected, as in Alternative 1. Alternative 3 was thus dropped from further study in 2001 because it did not reduce environmental impacts.

1.3.4.4 Alternative 4

Alternative 4 proposed a four-lane conventional highway with no frontage roads. Left-turn lanes were proposed at the intersections of State Route 156 with Breen Road/Mission Vineyard Road, Lucy Brown Lane, Bixby Road, Flint Road, and Union Road/Mitchell Road. The mainline would have shifted north to avoid the former San Justo School building. This alternative potentially displaced two homes and a business, and required relocation of a large number of utilities. The Project Development Team dropped this alternative in August 2003 because it did not reduce environmental impacts.

1.3.4.5 Alternative 5

Alternative 5 proposed a four-lane expressway with a two-lane frontage road on the north side only (access easements would have been provided to parcels on the south side). The mainline shifted north of the former San Justo School building. This alternative potentially displaced five homes and a business and required relocation of

a large number of utilities. Right-of-way was required from approximately 27 parcels. The Project Development Team dropped this alternative from further study in August 2003 because it did not reduce environmental impacts.

1.3.4.6 Alternative 5A

Alternative 5A proposed a four-lane expressway with a two-lane north frontage road and access easements on the south. The mainline shifted north of the former San Justo School building. This alternative affected 31 property parcels, and required the relocation of several homes and many utilities. An unsignalized intersection was planned at Lucy Brown Lane. The Project Development Team dropped Alternative 5A from further study in August 2003 because it was unfeasible and it did not reduce environmental impacts.

1.3.4.7 Alternative 6A

This alternative proposed a four-lane expressway with a two-lane frontage road on the north and access easements on the south. The main alignment would shift south of the former San Justo School building. An unsignalized intersection was planned at Lucy Brown Lane. The Project Development Team dropped Alternative 6A from further study in August 2003 because it was unfeasible and did not reduce environmental impacts.

1.3.5 Transportation Systems Management Alternatives

Transportation Systems Management strategies consist of actions that increase the operational efficiency of existing roadways; they are actions that increase the number of vehicle trips a road can carry without increasing the number of through lanes. Examples of Transportation Systems Management strategies include ramp metering, auxiliary lanes, turn lanes, reversible lanes, and traffic signal coordination. Transportation Systems Management also encourages automobile, public and private transit, and ridesharing programs, as well as bicycle and pedestrian improvements as elements of a unified urban transportation system.

Transportation Systems Management strategies are usually used in more urban environments, but these strategies can be used in rural environments when they serve the purpose of a project. Use of such strategies would not serve the purpose of this project because additional lanes are required to serve the project need.

1.4 Environmentally Superior Alternative

The California Environmental Quality Act requires the identification of the "Environmentally Superior Alternative," the Build Alternative with the fewest adverse environmental impacts. The No-Build Alternative is not to be considered as the Environmentally Superior Alternative for the purposes of this discussion.

The Build Alternatives do not differ greatly in their environmental impacts. The loss of farmland is considered an adverse environmental impact and the extent of that impact appears to correspond to the amount of land or right-of-way required for each Build Alternative under consideration – the more area needed, the more loss of farmland. Although Alternative 4A requires the least amount of farmland, only 128 acres compared to 206 acres each for Alternatives 2 and 6, it also proposes relocation of above ground and underground utilities. Alternative 6 results in more conversion of farmland but would use the existing State Route 156 as the northern frontage road, eliminating the relocation of any utilities. Alternative 4A, based on the least amount of farmland conversion, would be the Superior Environmental Alternative.

1.5 Permits and Approvals Needed

Before construction, the following permits, approvals, and consultation would be required:

Table 1.4 Permits and Approvals

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species and review Section 404 Permit	Biological Assessment will be sent to U.S. Fish and Wildlife Service after preferred alternative is chosen
U.S. Army Corps of Engineers	Section 404 Permit for filling or dredging Waters of the United States	Application for Section 404 permits anticipated after final environmental document distribution
Regional Water Quality Control Board	Section 401 Water Quality Certification	Application for Section 401 permit anticipated after final environmental document distribution
California Department of Fish and Game	1602 Agreement for Streambed Alteration, Section 2080.1 for work within the San Juan Creek	Application for Section 1602 permit anticipated after final environmental document distribution

1.6 Alternative Maps and Cross Sections

The Build Alternatives are shown in Figures 1-4, 1-5, and 1-6. Cross Sections for the Build Alternatives are shown in Figure 1-7.

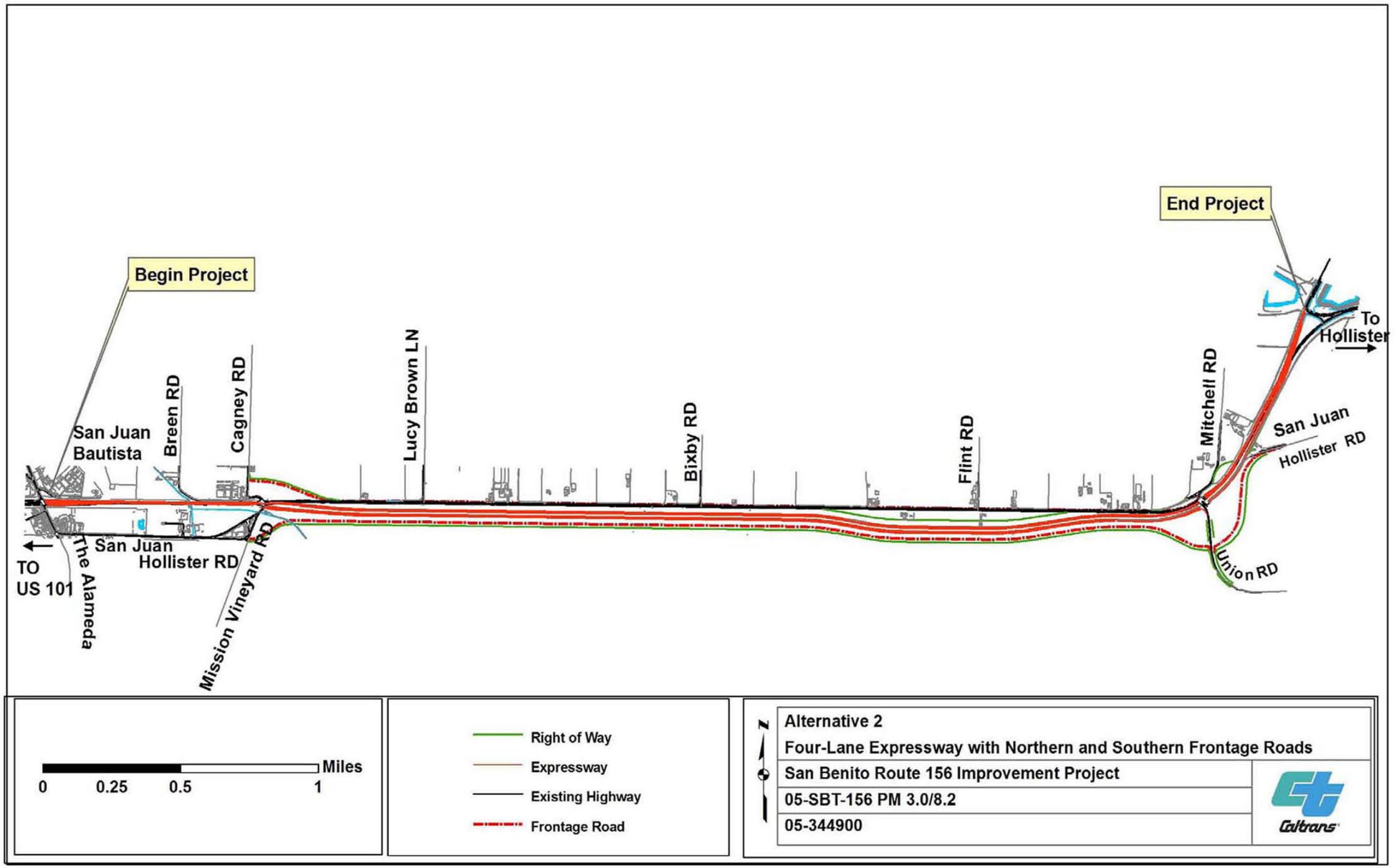


Figure 1-4 Alternative 2

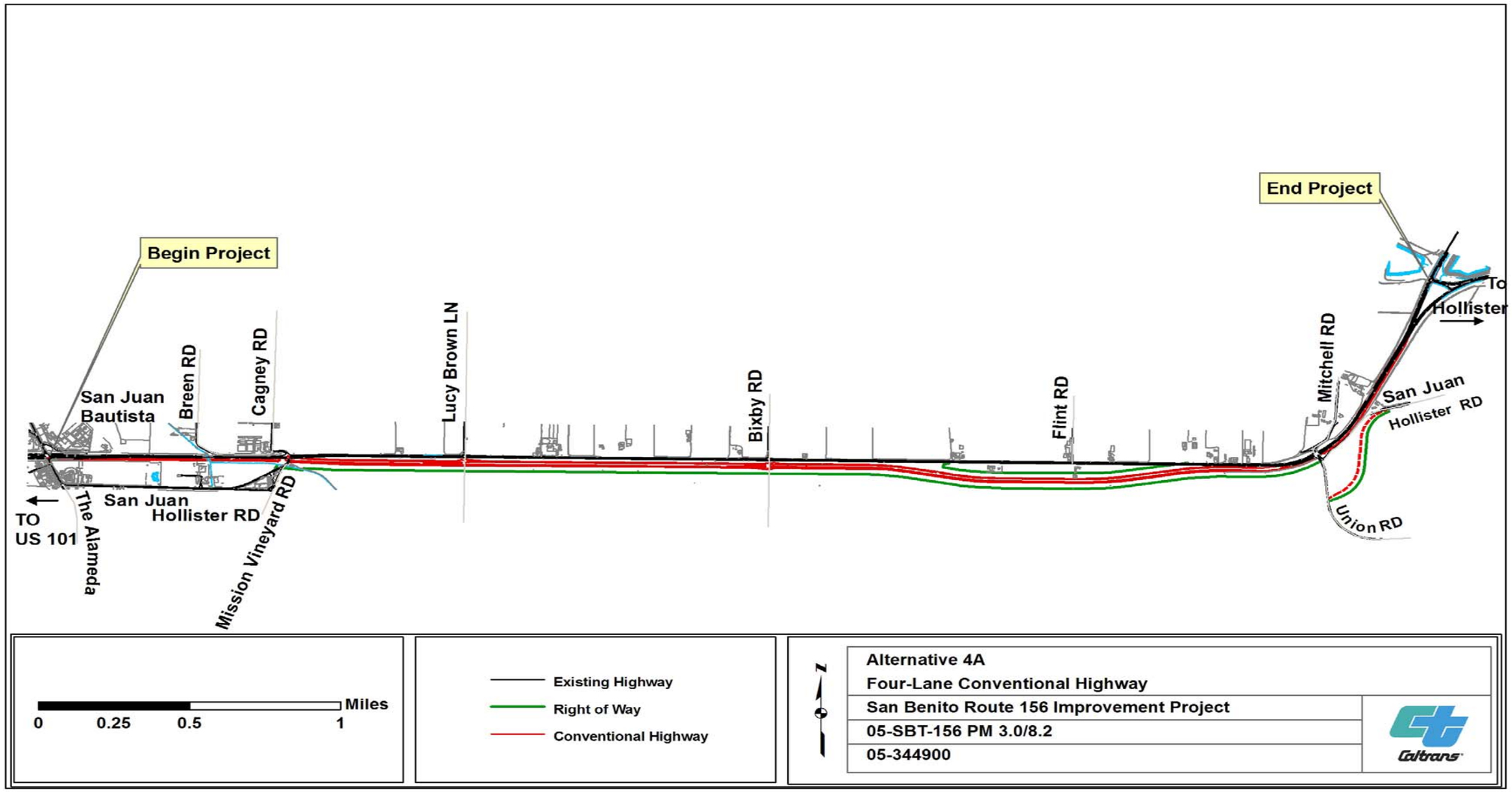


Figure 1-5 Alternative 4A

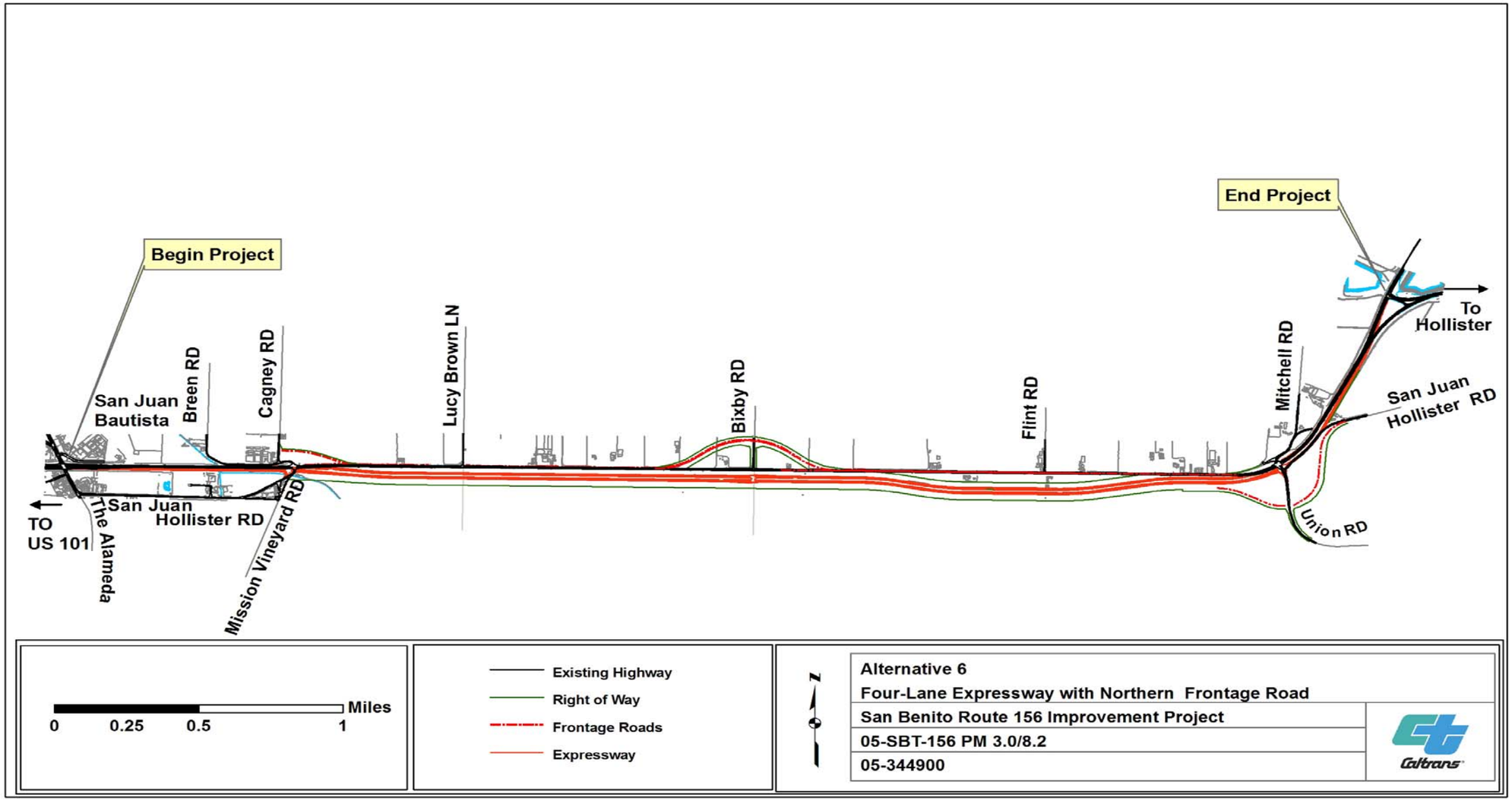
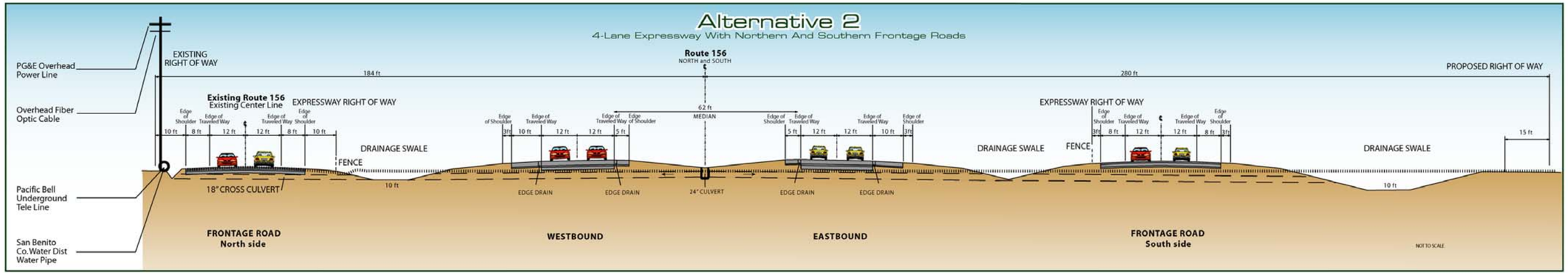
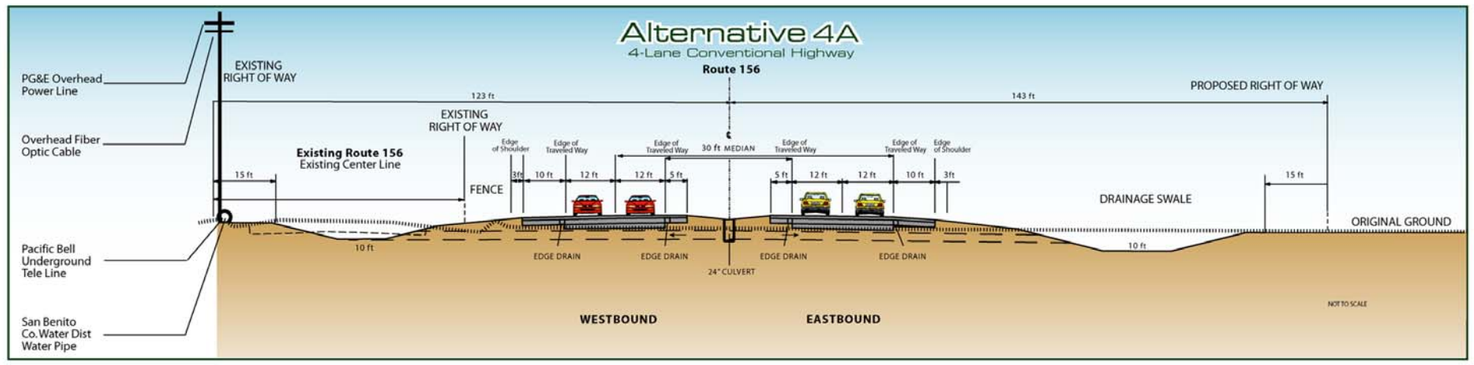


Figure 1-6 Alternative 6





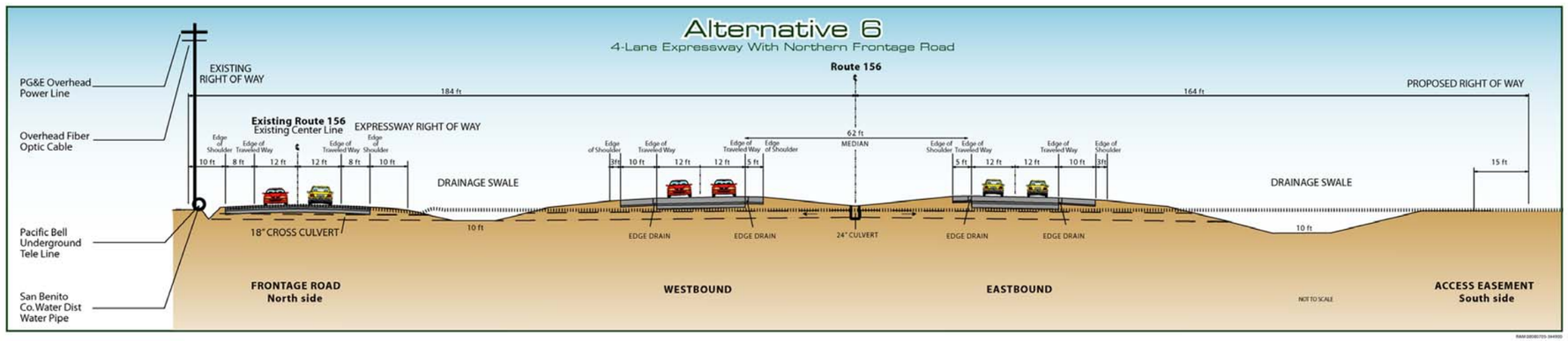


Figure 1-7 Typical Cross Sections

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 environment 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. Indirect and cumulative impacts are included in the general impacts analysis and discussions in Chapters 2 and 3.

As part of the preliminary 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.

- Coastal Zone - The proposed project is not located in the coastal zone.
- Wild and Scenic Rivers - No rivers classified as Wild and Scenic were identified in the proposed project area.
- Parks and Recreation - No parks or recreation facilities were identified in the proposed project area.
- Farmland/Timberlands – No timberlands are located in the proposed project area. Farmland impacts are discussed in Section 2.1.3, Farmlands/Timberlands.
- Energy - Energy use during construction would not substantially affect energy delivery or supply.
- Paleontology - The proposed project is entirely underlain by Quaternary Alluvium. This material has a low potential for the discovery of terrestrial vertebrate remains; therefore, no paleontological impacts are expected. If any vertebrate or plant fossils are found during construction, the Resident Engineer is required to stop construction in the discovery area within a 33-foot radius until the District Paleontology Coordinator reviews the discovery.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 Existing and Future Land Use

Affected Environment

The land use element of the San Benito County General Plan, last amended in December 2002, defines most land use surrounding the proposed project as "agriculturally productive." This classification generally applies to prime agricultural lands, but may include agriculturally productive lands of any type, such as grazing land. Agricultural land use is discussed in greater detail in Section 2.1.3, Farmland/Timberland.

Urban development is concentrated east and west of the project area in the incorporated cities of San Juan Bautista and Hollister. State Route 156 travels about one mile through the southern portion of the city limits of San Juan Bautista. The Alameda on the west, San Juan Hollister Road on the south, and Mission Vineyard Road on the east define the city limits south of State Route 156. Within this southern portion of San Juan Bautista, adjacent to the proposed project, approximately 20 acres are zoned for commercial, high-density residential, and industrial uses. This zoned area includes the Mission Farm RV Park (which features about 140 spaces with access to water, sewer, electricity, showers, and restrooms), the San Juan Inn (a motel), and a few single-family residences.

Beyond the city limits, the majority of the project travels through rural-residential farmland with numerous farms and farming structures scattered north of the existing highway.

South of the existing highway, near Flint Road, there are two small residential properties, one of which is the former San Justo School. Closer to Bixby Road, there is the Ferry Morse Seed complex on a 112-acre parcel. These properties are surrounded on the south by over 600 acres of farmland. The former San Justo School and the Ferry Morse Seed Complex are discussed in detail in Section 2.1.8, Cultural Resources. Residences are addressed in detail in Section 2.1.4, Community Impacts.

The east end of the proposed project area includes land classified as "rural transitional," which is seen as traditional rural development becoming more urban over time. "Rural transitional" assumes development will occur, but that it should

adhere to rural standards. These transitional areas also buffer denser residential development from encroaching on exclusively agricultural areas to minimize the potential premature conversion of agricultural lands to urban uses. Such transitional areas are usually located close to major transportation routes and existing non-agricultural land uses, including residential and business use.

Development at the east end of the proposed project is primarily within the 2,000 aces of the San Juan Oaks Golf Club. This approved future development will include 187 single-family residences, a 200-room resort hotel, two golf courses, and commercial buildings. Construction is anticipated to begin late in 2010. The entrance to the San Juan Oaks Golf Club is approximately 900 feet south of State Route 156 on Union Road.

On a regional scale, the Monterey County Land Use Plan indicates that land use west of the proposed project in Monterey County is primarily agricultural and sparsely residential. The Santa Cruz County Geographic Information System database indicates that southern Santa Cruz County land use northwest of the proposed project is primarily agricultural.

Impacts

The proposed project would not require nor encourage a change in the existing and planned land use. The proposed project requires linear strips of additional right-of-way adjacent to the existing State Route 156. Most of the right-of-way needed is currently used for agricultural purposes and no residences would be acquired.

Avoidance, Minimization, and/or Mitigation Measures

Farmland impacts are addressed in Section 2.1.3.

2.1.1.2 Consistency with State, Regional, and Local Plans

Affected Environment

San Benito County

San Benito County is classified as a non-urban area and is not required to develop a Congestion Management Plan. A Congestion Management Plan assures that all reasonably available travel demand reduction and operational management strategies have been adopted for the proposed project and that it is consistent with the State Congestion Management Plan developed for urban areas.

The proposed project is compatible with the Regional Transportation Plan and the San Benito County General Plan. In 2006, the San Benito County Board of

Supervisors and the San Benito Council of Governments passed separate resolutions identifying their three top transportation priorities: widening Highways 25, 152, and 156.

City of San Juan Bautista

The City of San Juan Bautista included the widening of State Route 156 to four lanes between The Alameda and Hollister in their General Plan as part of the expected road improvements needed by 2015. The road improvements are needed to meet the needs of future city growth and the expected increase in tourist traffic.

City of Hollister

The City of Hollister lists the widening of State Route 156 from two to four lanes in their General Plan as one of the circulation improvements assumed to be in place by the year 2023. The road improvement is designed to maintain or improve the current Levels of Service and meet future traffic demand within their city and San Benito County.

Impacts

The proposed project is listed as one of the county's transportation goals in the 2005 Draft Regional Transportation Plan, which sets the goals, policies, and projects for transportation improvements in San Benito County. However, the City of San Juan Bautista has expressed concerns about the proposed project in City Council Resolution 2000-02 and public meetings. Included are concerns that the proposed project would:

- Diminish the small town atmosphere
- Reduce farmland acreage
- Encourage development
- Affect city irrigation water and drainage systems
- Negatively affect business
- Increase noise

The City Council of San Juan Bautista has indicated that Caltrans' efforts to meet regional and interregional highway demand in the area should focus on other existing east/west routes; e.g., 152 and 25, or on a new alignment, such as the Farm Bureau's 3-in-1 Alternative.

The proposed 3-in-1 Alternative has greater environmental impacts than the proposed State Route 156 project because the route requires a new alignment and right-of-way

acquisition that affects unique and prime farmland used for organic farming, wetlands, and critical habitat for endangered or threatened species.

Improvements to State Route 152 and 25 are proposed; however, any highway improvement other than on State Route 156 itself would not meet the full Purpose and Need of the proposed project—to improve route continuity, safety, and the level of service of the existing State Route 156.

Avoidance, Minimization, and/or Mitigation Measures

There would be no business relocations or reduction in business access and/or parking with the proposed project. Measures to reduce impacts to farmland are discussed in Section 2.1.3 Farmlands/Agricultural Lands. Growth inducement is discussed in Section, 2.1.2 Growth. Irrigation and drainage are discussed in Section 2.2.1 Hydrology/Floodplain. Noise impacts are discussed in Section 2.2.5.

2.1.2 Growth

This section addresses the relationship between the proposed project and area growth patterns.

Growth inducement is defined as the relationship between the proposed project and growth within the project area. Factors affecting growth patterns depend on a range of economic forces that can be local, statewide, or even national in scope.

Regulatory Setting

The Council on Environmental Quality regulations, which implement the federal National Environmental Policy Act of 1969, require 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 Federal Regulations 1508.8, refer to these consequences as secondary impacts. Secondary 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

Caltrans completed a Community Impact Assessment for the proposed project in July 2004, supplemented with additional research by Caltrans in 2006. The Community Impact Assessment requires an analysis of the proposed project for growth inducement.

The "Land Use Goals and Objectives" of the San Benito County General Plan emphasize managing growth to maintain the county's rural atmosphere, character, and amenities. With managed growth, a goal of balanced housing types, locations, and a relatively wide range of prices would accommodate families from all socioeconomic backgrounds. The General Plan also emphasizes a diversified economic base with commercial developments that are compatible with other land uses.

The U.S. Census Bureau indicates the population of San Benito County has grown at a rapid rate. Between 1990 and 2000, the county experienced a 45.1 percent population increase, while the state's increase in population was only 13.6 percent. Recently, the growth trend has slowed down for San Benito County and between 2003 and 2004 only a 1.4 percent increase in the population occurred. The City of San Juan Bautista, on the other hand, has avoided the growth trend of the state and county, adding only 82 people to its population, an increase of only 5 percent between 1990 and 2005 (see Table 2.2).

There were 16,499 housing units in 2000 and 926 non-farm businesses in San Benito County. The county's land area measures 1,389 square miles, averaging 38.3 persons per square mile. This compares to the state's average of 217.2 persons per square mile.

Table 2.1 displays year 2000 census data in detail for the county and state. Annual and 10-year population/employment trends for San Benito County far exceed the statewide average.

Table 2.1 Population Data for San Benito County and California

Residents	San Benito County	California
Population, 2001 estimate	55,098	34,501,130
Population percent change, April 1, 2000-July 1, 2001	3.5%	1.9%
Population, percent change, 1990 to 2000	45.1%	13.6%
Travel time to work 16 minutes +, 2000	33.7	27.7
Housing units, 2000	16,499	12,214,549
Business	**San Benito County**	**California**
Private non-farm establishments, 1999	926	784,935
Private non-farm employment, 1999	10,147	12,356,363
Private non-farm employment, percent change 1990-1999	26.1%	9.2%
Geography	**San Benito County**	**California**
Land area, 2000 (square miles)	1,389	155,959
Persons per square mile, 2000	38.3	217.2

Source: U.S. Census Bureau State & County Quick Facts

Table 2.2 displays the growth trend in San Benito County and its two incorporated cities. Included is the percentage of employees over the age of 16 who travel outside San Benito County for work.

Table 2.2 Population Data Comparison

Residents	San Benito County	City of Hollister	City of San Juan Bautista
Population, 1990	36,697	19,212	1,570
Population, 2000	53,234	34,413	1,549
Population, 2005 (estimated)	55,936	35,941	1,652
Percentage Commuting to Work Outside San Benito County	48.5	48.6	49.8

Source: U.S. Census Bureau Factfinder

Impacts

The relationship between the proposed project and growth in the San Juan Bautista and Hollister areas is expected to be one of accommodating planned growth, rather than growth inducement.

Most of the land adjacent to the proposed project is zoned for agricultural use. Zoning is under local jurisdiction and is not subject to change without a local decision. The proposed project would not preclude continued agricultural uses.

The proposed project conforms to the growth-related policies of the San Benito County Regional Transportation Plan, the San Benito County General Plan, and the City of San Juan Bautista General Plan.

The proposed project would not provide additional access points (driveways or easements) or result in zoning changes; therefore, it is doubtful that fast food restaurants, service stations, or lodging would result from the project.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures pertaining to growth inducement are included in the proposed project because there is no evidence of residential or business growth resulting from construction of any Build Alternative.

2.1.3 Farmlands/Timberlands

Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 U.S. Code 4201-4209; and its regulations, 7 Code of Federal Regulations Part 658) require federal agencies, such as the Federal Highway Administration, and Caltrans as assigned, 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

Agriculture is the predominant land use and economic source for San Benito County. The California Department of Conservation reports that 76 percent or 677,238 acres of San Benito County's 889,387 acres are farmland. San Benito County divides this classification into two density zones: agricultural productive and agricultural rangeland. In addition to agriculture, the county allows grazing, wildlife refuges, very low-density residential, mineral extraction, low-intensity recreational, and institutional land uses on farmland. However, according to the Natural Resources Conservation Services, for purposes of the Farmland Protection Policy Act, only

86,937 acres is considered prime farmland, unique farmland, and land of statewide or local importance.

The 2002 United States Department of Agriculture Census of Agriculture (latest available) indicates that there are 677 farms in San Benito County with an average size of 854 acres. The Natural Resource Conservation Service indicates that farms in the proposed project area average 982 acres. San Benito County's 2005 Crop Report stated that the county had approximately 30 organic growers, growing 50 different crops on approximately 4,000 acres. The report also stated that the county's gross value of agricultural production was over $268 million. The top three crops were lettuce (salad), nursery stock, and miscellaneous vegetable and row crops.

Impacts

A Natural Resource Conservation Service Farmland Conversion Impact Rating was completed for the proposed project. The Natural Resource Conservation Service 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 Resource Conservation Service determined that the proposed project would convert farmland having a relative value between 92 and 94 out of 100 possible points under these criteria. Because acreage converted is only one of several factors, alternatives may be allotted similar points even with dissimilar acreage conversion. An additional 94 points were factored in on the Natural Resource Conservation Service form using other criteria for a total impact rating ranging from 185 to 187 points for the Build Alternatives. The Natural Resource Conservation Farmland Conversion Impact Rating Form (AD 1006) is included in this document in Appendix F.

Based on the California Department of Conservation, Office of Land Conservation's Farmland Mapping and Monitoring Program, the proposed project is surrounded by Prime Farmland or Farmland of Statewide Importance.

Table 2.3 displays farmland conversion information by alternative. Alternative 4A would affect the least amount of property parcels and require the least amount of farmland. Alternatives 2 and 6 would convert the same amount of farmland. Although Alternative 6 is constructing only one frontage road, it requires additional right-of-way to provide adequate distance between the frontage road intersection at Bixby Road and the intersection at State Route 156/Bixby Road. Alternative 6 would also affect more property parcels than Alternatives 2 and 4A.

Table 2.3 Farmland Conversion by Alternative

Farmland Breakdown	Alternative 2	Alternative 4A	Alternative 6
Total number of property parcels affected	16	11	22
Total Land Converted	206 acres	128 acres	206 acres
Prime/Unique Farmland Converted	206 acres	128 acres	206 acres
Percent of Farmland Converted in County	0.002	0.001	0.002
Farmland Conversion Impact Rating	186	187	185

Source: Natural Resource Conservation Service

Although the No-Build Alternative would not convert any farmland, adverse impacts to the transport and processing of local produce may occur as projected traffic increases lead to delays and/or re-routing of farm equipment and produce trucks.

Williamson Act

According to the Natural Resource Conservation Service, the average farm size in the project area is 892 acres. Five parcels affected by the project are under Williamson Act contracts. Two individuals own all five parcels, according to the San Benito County property records. The Build Alternatives would not acquire enough farmland from any single parcel to result in the cancellation of any Williamson Act contracts. Table 2.4 displays the parcels and the acreage required from each parcel.

Table 2.4 Williamson Act Properties Affected

Assessor's Parcel Number	Acres in Parcel	Estimated Acres Needed		
		Alternative 2	Alternative 4A	Alternative 6
018-180-004	349.16	58.13	35.67	47.77
018-180-006	112.20	33.31	21.50	33.14
018-180-007	382.50	18.76	12.48	18.13
018-190-017	126.80	22.84	15.25	21.17
018-190-019	161.19	25.91	17.71	24.09
TOTAL	**1131.85**	**159.25**	**102.61**	**144.27**

Avoidance, Minimization, and/or Mitigation Measures

Impacts to farmland cannot be avoided, because farmland surrounds the proposed project area. Farmland acquisition would occur with any of the Build Alternatives.

The Farmland Protection Policy Act requires consideration of impacts from those alternatives exceeding 160 points on the Natural Resource Conservation Service Farmland Conversion Impact Rating. Measures to minimize impacts include selecting the alternative with the least potential impacts that still meets the Purpose and Need of the project. Selection of the preferred alternative takes place after the public circulation phase is completed. Farmland impact was a consideration in determining

which alternatives would warrant further consideration and which alternatives would be withdrawn.

Cumulative Impacts

The current San Benito County zoning maps indicate that most of the project area will continue to be preserved for agriculture. Most of the farmland in the project area is Prime and Unique Farmland. It would be impossible to build the project without converting farmland due to the rural nature of the project. The only option to avoid the conversion of farmland would be the No-Build Alternative, which does not meet the Purpose and Need of the project.

Cumulative impacts to farmland are occurring as planning for the area includes new housing development and the infrastructure to support it. Sections of Highway 156 west and east of the proposed project were upgraded to expressway in the late 1990s with some resulting conversion of farmland. A 2,000-acre approved housing development at the east end of the proposed project would convert up to 113 acres of county farmland. These projects, taken in conjunction with the other proposed projects in the area, would result in cumulative impacts to farmland in the area.

Caltrans considered measures to convert fewer acres of farmland. The conversion of farmland was considered during the design of the intersections and frontage roads at Union Road by keeping the alignment as close to the new highway as permitted. Remnant parcels of farmland were avoided as much as possible by acquiring right-of-way in “slivers” or linear strips of property adjacent to the existing parcels. Caltrans also tries to negotiate parcel exchanges with neighboring farmers to reconfigure split farmland parcels for resale so that the parcels could continue to be farmed and not contribute further to the segmentation and conversion of farmland. When possible, Caltrans will allow farmland to be kept in production (after purchase) until it is needed for construction. Caltrans would provide relocation advisory assistance to any person, business, farm, or non-profit organization that would be displaced, or have onsite investments, such as wells and irrigation systems, displaced as a result of acquisition of real property for public use. Relocation resources would be available to all displaced individuals, free of discrimination.

The proposed project would offer a safer route for through traffic since it would remove slow-moving farm equipment from the main roadway by providing an additional travel lane or frontage roads. Frontage roads would offer a safer route for local traffic, farm equipment, pedestrians, and bicyclists. Farm equipment would be

moved north and south of State Route 156 via safer intersections. Measures were taken to provide access to all farmland and residential properties.

2.1.4 Community Impacts

2.1.4.1 Community Character and Cohesion

A Community Impact Analysis (August 2004) was completed as part of the environmental review for this project. Information from the Community Impact Analysis has been incorporated into the following discussion.

Regulatory Setting

The National Environmental Policy Act of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 U.S. Code 4331(b)(2)]. The Federal Highway Administration in its implementation of the National Environmental Policy Act [23 U.S. Code 109(h)] directs that final decisions regarding projects be to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

The proposed project begins at The Alameda within the southern city limits of San Juan Bautista. State Route 156 separates a small portion of the City of San Juan Bautista from downtown. South of State Route 156, the city limit is bordered by San Juan Hollister Road on the south, by Mission Vineyard Road on the east, and by a small single-family residential development west of The Alameda.

Within the city limits, in the southwest corner of the State Route 156/The Alameda intersection, is a small single–family residential development consisting of about 20

homes (see Appendix G). Across the highway, in the northwest corner of the same intersection is a market, which is separated from the highway by a parking lot and a small strip mall. On the northwest corner of the intersection, separated from the highway by Nyland Road, is the San Juan Elementary School. In the southeast corner of the intersection, separated from the highway by a small open field, is the San Juan Inn. The Mission Farm RV Park is also within the city limits of San Juan Bautista.

Less than one mile of the five-mile project would be within the city limits of San Juan Bautista. The larger portion of the project travels through an area of unincorporated San Benito County consisting of rural residential housing, farmhouses, farm buildings/structures, and developed farmland.

Impacts

No direct impacts to the City of San Juan Bautista are expected. No change to the city limits is expected, because the proposed project is not acquiring additional right-of-way between The Alameda and Mission Vineyard Road. The project would extend the existing four lanes at The Alameda to Mission Vineyard Road within the state right-of-way, which would not make any changes to public access within the city limits and would not impact community cohesion. The project is not expected to make changes to the existing growth patterns established by the City of San Juan Bautista.

Outside the city limits, given the rural nature of the area, the project is not expected to disrupt public access, divide neighborhoods, promote growth, or increase isolation of any communities. The project would not be expected to result in any reduction of regional transit service. No change in the quality of life is expected except a safer highway with safer access and intersections.

Avoidance, Minimization, and/or Mitigation Measures

In the past, the City of San Juan Bautista has expressed concerns that the project would result in adverse impacts to the rural setting and an increase in noise and air pollution. Noise abatement is recommended within the city limits. A sound wall may be constructed with consideration for aesthetic treatment and landscaping to soften the view. Tree removal would be minimized. An uncongested highway, however would decrease air pollution, rather than increase it.

In the rural area of the project, all Build Alternatives align to the south of the existing highway to reduce residential impacts. There is a potential to affect existing

automobile and pedestrian access to residences during construction, but provisions would be made to limit the disruption.

2.1.4.2 Relocations

Regulatory Setting

Caltrans' Relocation Assistance Program 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, Part 24. The purpose of the Relocation Assistance Program 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 Relocation Assistance Program.

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. Code 2000d, et seq.). Please see Appendix C for a copy of Caltrans' Title VI Policy Statement.

Affected Environment

Caltrans completed a Draft Relocation Impact Report in May 2004 for this project.

Impacts

Although linear strips of right-of-way are needed along State Route 156 for the proposed project, the right-of-way acquisition does not result in the relocation of any residences or businesses. To avoid the former San Justo School, an historic structure, the new alignment to the south may result in the relocation of a non-residential building or storage shed near a residence on Flint Road, but does not require the relocation of the residence. At Mission Vineyard Road, one well and pumphouse would be relocated as a result of the intersection design.

Avoidance, Minimization, and/or Mitigation Measures

Design modifications reduced the median width of the project between The Alameda and Mission Vineyard Road, eliminating the need for additional right-of-way from properties adjacent to State Route 156 between The Alameda and Mission Vineyard Road.

The project requires additional right-of-way and may result in the relocation of one non-residential building or storage shed, a well, and a pump house. At the time of

acquisition, when relocation would become necessary, all activities would then be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended (see Appendix D).

2.1.4.3 Environmental Justice

Regulatory Setting

All projects involving a federal action (funding, permits, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2006, this was $20,000.00 for a family of four.

All consideration under the Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of the Title VI is evidenced by its Title VI Policy Statement, signed by the Director, which can be found in Appendix C of the document.

Affected Environment

In 2004, Caltrans completed a Community Impact Assessment for the project, which included information from the 2000 U.S. Census and field reviews of the project area and surrounding communities.

There is minimal residential development in the actual project area, but the community most affected by the proposed project is San Juan Bautista. The project begins within the city limits at the intersection of State Route 156/The Alameda before it travels east into San Benito County and rural residential/farmland. There are approximately 20 single-family residences southwest of the intersection of State Route 156/The Alameda. Southeast of the intersection, but separated by a small open field, is the San Juan Inn, a motel. Northwest of the intersection, but separated by a parking lot, is a grocery store and small strip mall. Northeast of the intersection is the San Juan Bautista Elementary School, which has a frontage road between the school grounds and State Route 156. There are approximately 24 residences/farmhouses within the county along the existing State Route 156 between Mission Vineyard Road and Union Road/Mitchell Road.

The 2000 U.S. Census reported a total population of 5,437 residents in Census Tract 2, which includes the proposed project. There are 1,811 housing units in the census tract; of those, 1,168 are owner-occupied and 643 are renter-occupied. The average household size in owner-occupied housing units within the census tract is 2.49, and the average household size for renter-occupied housing units is 3.91.

According to the Census, San Juan Bautista had a population of 1, 549 citizens and the 1999 median household income was $43,355.00. The majority population was 62.3 percent White. The median household income for the County of San Benito was $56,319.00 in 2003, the latest year the data was provided, and the majority population was 65.2 percent White.

Impacts

No minority or low-income populations were identified within the project limits. No minority or low-income populations would be adversely affected by the proposed project. Therefore, this project is not subject to the provisions of Executive Order 12898.

Avoidance, Minimization, and Mitigation Measures

No mitigation is required.

2.1.5 Utilities/Emergency Services

Affected Environment

The City of San Juan Bautista does not have a city police department but is under the jurisdiction of the San Benito County Sheriffs Department, which has a substation located there. The office of the County Sheriff's Department is located in Hollister. The City of Hollister has its own police department. Both cities have their own fire departments, which handle fires and provide emergency medical and rescue services. The California Highway Patrol is responsible for traffic enforcement in unincorporated areas of the County.

Utilities identified within the proposed project area include:

- Pacific Gas and Electric power poles and associated overhead lines. Pacific Gas and Electric also operates a 12-inch underground high-pressure gas line in the project area.
- Pacific Bell telephone poles and associated overhead lines. Pacific Bell also has two fiber optic lines and two copper lines in the south shoulder of the existing highway.

- Charter Communications provides cable television access to the proposed project area. Charter has seven poles on a private easement.
- San Benito Water District operates a 27- to 30-inch waterline and associated laterals. This waterline is on a private easement.

Impacts

The project would have a beneficial impact on fire protection, law enforcement, emergency, and other public services by providing a safer and upgraded highway. In addition, the project would increase access to the project area and facilitate faster fire and medical response times to emergencies in the area by providing additional travel lanes, passing opportunities, and improved intersection crossings. In the same way, public and school transportation would also benefit from the improvements proposed by the project.

Construction impacts on traffic and transportation would not be substantial for any of the Build Alternatives because the proposed project would be aligned south of the existing State Route 156. If any traffic delays occur, fire protection, law enforcement, emergency, and other public services would be detoured to local roads.

Construction of all the Build Alternatives would require relocation of some utility facilities within the project limits. An underground gas line and overhead electrical lines are located parallel to the existing State Route 156. Alternatives 2 and 6 propose using the existing State Route 156 in place as the northern frontage road, which would eliminate the majority of utility relocations. However, the frontage road intersections at Cagney, Bixby, and Mitchell roads would require the relocation of a portion of the overhead electrical lines and buried gas lines. Alternative 4A requires the relocation of the majority of utilities, because the four-lane conventional highway would be constructed on new alignment south of the existing State Route 156.

Relocating utilities may require temporary construction easements and new permanent easements.

Avoidance, Minimization, and/or Mitigation Measures

During construction, a Traffic Management Plan would be developed to accommodate local traffic patterns and reduce delay, congestion, and accidents. Traffic delays would be minimal because the Build Alternatives would be constructed on new alignment. By building the proposed project in construction phases and rerouting traffic to local roads, disruption to local and regional traffic would be minimized with all Build Alternatives.

Relocation of aerial and underground electric, telephone, cable, and water lines would be coordinated with the affected utilities.

2.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans is committed to carrying out the 1990 Americans with Disabilities Act by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public would be provided to persons with disabilities.

Affected Environment

Caltrans completed a Traffic Analysis Report for the proposed project in July 2006. The traffic study included analysis on turning movements at intersections. Intersection peak-hour turning movement counts were taken along State Route 156 at The Alameda, Mission Vineyard Road, Lucy Brown Lane, Bixby Road, and Union Road/Mitchell Road. The intersections were evaluated using the adjusted counts in the level of service analysis with and without the project. Analysis was performed for the existing conditions (2005), for the year 2011 (the construction year), and for the year 2030 (future conditions). Based on the intersection data analyzed, depending on the Build Alternative, left- and right-turn lanes for eastbound and westbound traffic would be needed for all Build Alternatives. During the Plans, Specifications, and Estimate phase of the project, final turning lanes and length of widening would be determined based on the final design year turning movements.

Table 2.5 shows the existing conditions for eastbound and westbound traffic. The data includes the percentage of truck traffic, and the average speed in miles per hour (mph), and design hourly volume (the number of vehicles in an hour).

Table 2.5 Existing Average Annual Daily Traffic

	Eastbound Traffic (Average Annual Daily Traffic = 12,600)			Westbound Traffic (Average Annual Daily Traffic = 12,100)		
	*DHV	Truck	**mph	DHV	Truck	mph
AM Peak	913	8 %	57	1387	7%	56
PM Peak	1275	5%	49	768	9%	53

*DHV = Design Hourly Volume
**mph = miles per hour

Impacts

Table 2.6 shows the current and projected Level of Service (See Figure 1-3) at peak hours for eastbound and westbound traffic for the existing two-lane highway. The Level of Service indicates the quality of traffic flow, ranging from "A" (free flowing) to "F" (gridlock). The table also provides the average travel speed in miles per hour and the percent of time spent following another vehicle.

Table 2.6 LOS for Two-lane Highway or Existing Conditions

Direction		**LEVEL OF SERVICE (LOS)**								
		Existing (2005)			**No-Build (2011)**			**No-Build (2030)**		
		LOS	**PTSF**	**ATS**	**LOS**	**PTSF**	**ATS**	**LOS**	**PTSF**	**ATS**
Two-way	AM	E	91.6%	46.4	F	95.1%	30.2	F	96.2%	28.7
	PM	E	89.6%	42.3	E	93.1%	31.8	F	94.8%	29.6
Eastbound	AM	E	90.4%	42.4	F	91.4%	31.0	F	92.8%	29.5
	PM	E	88.4%	40.7	E	94.0%	32.4	F	96.1%	30.0
Westbound	AM	E	93.1%	45.8	F	96.3%	31.0	F	97.6%	29.5
	PM	E	85.1%	38.8	E	92.8%	32.3	F	96.6%	27.8

ATS = Average travel speed in miles per hour
PTSF = Percent of time spent following (another vehicle)

Table 2.7 shows the projected Level of Service for the proposed Build Alternatives at peak hours for eastbound and westbound traffic.

Table 2.7 LOS Proposed Alternatives

Alternative	Year 2011		Year 2030	
	Eastbound AM Peak	Westbound PM Peak	Eastbound AM Peak	Westbound PM Peak
Alternative 2 Four-lane Expressway with North/South Frontage Roads	B	B	B	B
Alternative 4A Four-lane Conventional Highway	B	B	C	B
Alternative 6 Four-lane Expressway with Northern Frontage Road	B	B	C	B

Based on the data presented, the existing two-lane conventional highway is operating at capacity, Level of Service E, with drivers spending most of their time following a vehicle at a speed about 10 miles per hour slower than the posted speed limit of 55 miles per hour. Without the proposed project, traffic is expected to be congested by the year 2011, and by the year 2030, the road would operate at a Level of Service F, in a congested condition with considerable delays.

Level of service is improved with the Build Alternatives. By the year 2011 (construction year), all the Build Alternatives would operate at a Level of Service B, with no delays. By 2030, Alternative 2 would operate at a Level of Service B, with no delays, and Alternatives 4A and 6 would operate at Level of Service C, with minimal delays.

Public access is now available directly from State Route 156 to farms and residences north and south of the highway. Public access would continue to be available with all Build Alternatives via frontage road(s) or easements. The project would not have a negative affect on access to businesses, residences, public resources, or public transportation.

No bicycle facilities currently exist in the proposed project area that would be adversely affected by the proposed project. None of the Build Alternatives have any bicycle facilities planned. However, Alternative 4A would provide wider shoulders for pedestrians or bicyclists to use, and Alternatives 2 and 6 propose frontage roads, which would offer pedestrians, bicyclists, and slower-moving traffic (trucks and farm equipment) a safer route.

The project would alter traffic patterns by directing traffic on the frontage roads or easements to proposed intersections. However, this change in traffic patterns is

expected to bring safer access on and off of State Route 156. The project would provide safer passing opportunities for traffic and reduce the conflict between slower-moving traffic (trucks and agricultural vehicles) and passenger vehicles. By correcting the compound curve, the distance a driver can see ahead would be improved, thereby increasing safety. The height of the roadway would be raised and side ditches improved to prevent flooding on the highway.

Construction impacts on traffic and transportation would not be substantial because the proposed project would occur on new alignment.

Avoidance, Minimization, and/or Mitigation Measures

A comprehensive Traffic Management Plan to minimize delays will be developed after selection of a preferred alternative. Standard Caltrans construction practices include information on roadway conditions, portable changeable message signs, lane and road closures, advance warning signs, alternate routes, reverse and alternate traffic control, and a traffic contingency plan for unforeseen circumstances and emergencies. Prior to construction, Caltrans will meet with local public officials to review the plan as well as publicize plan details. Construction may be scheduled to avoid areas that need access during certain seasons, such as harvest season.

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. Code 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of the National Environmental Policy Act [23 U.S. Code 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

Caltrans completed a Draft Visual Impact Assessment in June 2004, which was updated in November 2004. Another updated Visual Impact Assessment was completed in May 2007.

The importance of preserving "the look and feel" of the San Juan Bautista area and the local community's sensitivity to the aesthetic character of the region have been identified by several city and county policies and planning documents. The *San Juan Bautista 1998 General Plan*, especially the *Community Design Element*, the *Historic San Juan Bautista Plan 2002*, and the *San Juan Bautista Municipal Code* all affirm long-range goals, objectives, and policies for protection of visual resources that strengthen the identity of the city, and sustain quality of life. Community members have identified the following scenic qualities and landscape resources as being valued in the visual character of the region:

- Expansive views of open space, distant hills, and night sky observation
- The natural world is readily apparent (varied terrain, oaks, and grassy hills)
- Rural environment including agriculture and ranching
- Historic town atmosphere

The San Juan Bautista community has defined an aesthetic identity for itself, but that identity is within the wider context of neighboring Hollister and surrounding San Benito County. The transportation needs and aesthetic sensitivities of the regional population are also affected.

The project setting consists mainly of flat open space, with farm row crops or orchards bordered by distant hills, and of scattered rural residential development, with denser suburban, commercial, and light industrial development near downtown San Juan Bautista and Hollister. The highway is also a major component of the view. A typical pattern of oak and grass-covered hillsides combined with agricultural land uses creates a predominately rural feeling and characterizes the region's scenic beauty.

Impacts

Construction of any of the Build Alternatives proposed for the project would result in alteration of the rural agricultural character in general and may lessen the visual compatibility with the existing surroundings.

The proposed new lanes, intersections, and raised profile would be placed in the context of an existing highway with similar features at each end. Initially, their contrast with the existing two-lane road would be very high and most notable to local residents familiar with the route. Other motorists will have less sensitivity to elements in the highway environment, especially if they are unfamiliar with the area or are commuters passing through. Multiple lanes are a common sight along State Route 156 and would not be unduly noted by most drivers. Truck drivers and commercial travelers would be expected to have the lowest sensitivity to the proposed project and would tend to view it from an improved safety perspective rather than an aesthetic one. However, inclusion of the proposed median strip, frontage roads, and drainage channels would make the proposed footprint of any of the three project alternatives considerably wider than other segments of the route.

The proposed project would raise the road's elevation up to five feet to protect the highway from flooding. Such a change could be seen from multiple locations, angles, and distances. The elevated profile would be more noticeable to surrounding neighbors, especially those positioned below on the flat valley floor. The quality of their view may decrease because the raised profile would block the horizon line. Grading for drainage channels would result in a loss of cultivated land and would contrast with both the existing elevation of the level agricultural terrain and the higher road section.

The higher vantage point of the raised profile would give motorists better access to panoramic views. The proposed project would not block highway users' views of the surrounding hills, which contribute greatly to the scenic quality of the corridor. However, motorists would also view a much wider expanse of pavement and human-made elements, and visual proximity to foreground details of agricultural planting would become more distant. Expressways are typically fenced to prevent public access, which would also place a human-made element between the viewer and the agricultural fields.

Local residents, especially those with homes on or near the existing route or proposed alignment, are very sensitive to the visual quality of their neighborhood and are likely to have a negative impression of the proposed changes. A diminished view of farms, the loss of vegetation, and the addition of a substantial width of pavement and related human-made structures, such as signs and utilities, into an area with moderate to low previous encroachments would result in an overall loss of rural character. Homes in the project area would be preserved by the proposed alternatives, so characteristic

views of rural farms or historic structures such as the former Ferry Morse Seed Company, the Breen Adobe, and the former San Justo School would still exist.

The views from the new highway looking north, east, and west toward the former schoolhouse are screened along the rear and side property lines by dense vegetation, outbuildings, and fences, so there are no notable existing views of the former schoolhouse building from these vantage points.

The San Juan Bautista General Plan, Community Design Element, specifically cites the visual benefit of the mature redwood trees buffering the Mission Farm RV Park. The potential sound wall bordering the Mission Farm RV Park would partially block motorists' view of these trees but no trees would be removed. Reconfiguration of the Union Road/Mitchell Road intersection would result in the loss of some scattered vegetation, and the realignment of the San Juan-Hollister frontage road east of Union Road would result in a cut slope along the hillside.

Avoidance, Minimization, and/or Mitigation Measures

Design changes have narrowed the median width between The Alameda and Mission Vineyard Road to minimize impacts to trees for all alternatives.

Visual mitigation seeks to preserve or enhance existing scenic qualities, frame desirable vistas, screen or distract from undesirable views, use forms and materials that relate well to existing elements, and apply aesthetic treatments that fit the visual character of the area. Each type of impact, its location, and potential cumulative impacts determine which measures would be most effective in reducing the impacts.

Based on the visual quality assessment of the proposed alternatives and local community planning guidelines, the following measures would be incorporated into the final project design for all proposed alternatives:

- Grading would be minimized as much as possible to preserve existing vegetation, especially to avoid the loss of mature trees.
- A sound wall, if built, would match the aesthetic of the other Mission-style noise barriers in the area. However, landscaping in front of the wall may not be possible due to space limitations.
- New fencing, where required, would be consistent with existing fencing in rural areas.
- Traffic signage would be limited to the greatest extent possible and obsolete signs would be removed.

- Any proposed light fixtures would be shielded to help preserve dark, night-sky views and low-pressure sodium lighting is preferred.
- Landscaping, including scattered skyline trees, would be planted where appropriate to distract from the visibility and dominance of wide-paved expanses and as needed to unify the region's distinct visual identity. Landscape planting would not block major views of agricultural fields or distant mountains.
- Planting would include a variety of sizes of plant material to increase the density of cover and screen more quickly and to lend a more mature blended appearance to the overall project.
- Signature landscape planting at "entry" points would emphasize the sense of arrival or departure from the San Juan Bautista community.
- Medians would be left unpaved and would be seeded with low-growing grasses and wildflowers.
- Intersection slopes, drainage channels, and areas adjacent to frontage roads would be similarly seeded and left to grow into a natural and rural appearance.

Cumulative Impacts

State Route 156 was built in 1961 as a two-lane conventional highway with the concept that two additional lanes would be added at some future date. Since then, the route has undergone many changes near the project area: an interchange for State Routes 101/156 was constructed; a two-mile segment of State Route 156 was expanded to a four-lane expressway from State Route 101 to Monterey Street in San Juan Bautista; west of the project limits, the route was widened from two lanes to four lanes with a concrete median; and in 2005 an additional concrete barrier was placed along the same stretch. In 2002, turn lanes and the entrance to Rocks Road was altered; in 1996, the Hollister Bypass was constructed to the east; and Union Road was constructed to facilitate residential development south of Hollister and State Route 156. Further improvements to the intersection of Union Road and Mitchell Road are under consideration.

The cumulative effect of multiple previous transportation projects would become more noticeable with this latest proposed change to the five-mile stretch of State Route 156, which is the only remaining two-lane section of the original rural highway. San Benito County's transition from a rural county to a more urbanized county has placed tremendous pressure on the county's transportation system. Two-lane undivided rural highways that were used primarily for the movement of agricultural equipment and goods are now carrying large numbers of suburban commuters.

Most viewers unfamiliar with the area would perceive the project as just another part of the route because the project would look like the existing expressways at either end of the project limits. Changes to the intactness of the view outside the confines of the existing highway edge, such as the loss of farmland or blocking of distant view by development, are most likely to contribute to a decrease in the scenic rural character of the area, especially when combined with the expected sensitivity of local viewers of the roadway and surrounding neighbors.

2.1.8 Cultural Resources

Regulatory Setting

"Cultural resources" as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include the following.

The National Historic Preservation Act of 1966, 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 Part 800). On January 1, 2004, a Section 106 Programmatic Agreement among the Advisory Council on Historic Preservation, 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 on Historic Preservation's regulations, 36 Code of Federal Regulations Part 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The Federal Highway Administration's responsibilities under the agreement have been assigned to Caltrans as part of the Surface Transportation Delivery Pilot Program (23 Code of Federal Regulations 773) (July 1, 2007).

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.

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 listing criteria for the National Register of Historic Places.

Affected Environment

Caltrans prepared a Historic Property Survey Report and supporting technical documents in November 2002 and forwarded them to Federal Highway Administration for processing and transmittal to the State Historic Preservation Office. The State Historic Preservation Office concurred with the eligibility determinations documented in the Historical Property Survey Report (See Appendix E, State Historic Preservation Office Concurrence Letters). In accordance with the implementing regulations for Section 106, Caltrans, as assigned by the Federal Highway Administration, will prepare a finding of effect report in consultation with the State Historic Preservation Officer.

The area of potential effect for the San Benito 156 Improvement Project extends from the intersection of State Route 156 and The Alameda eastward to just beyond the intersection of State Route 156 and Union Road/Mitchell Road. The area of potential effect represents the area within which the proposed project has the potential to affect, whether directly or indirectly, significant archaeological or built-environment resources.

Archaeology

The archaeological area of potential effect encompasses the anticipated ground-disturbing activities for all of the project alternatives and includes all construction areas, equipment staging and material storage areas, easements, and areas where additional right-of-way is needed. A 100-foot buffer around the outer limits of these zones is also included within the archaeological area of potential effect to accommodate minor design changes.

The archaeological resources investigation was designed to locate previously recorded sites, survey the project vicinity for previously undiscovered historic and prehistoric archaeological sites, and collect archival information from various facilities. All prehistoric archaeological site records for the Chittenden, San Felipe, Three Sisters, San Juan Bautista, Hollister, and Tres Pinos 7.5’ U.S. Geological Survey quadrangles were obtained to look at regional patterns. The investigation also included consultation with several Native American tribes/communities regarding project findings, sacred lands, and special tribal concerns.

Thirteen archaeological surveys have been conducted within the project's area of potential effect since 1973, resulting in no prehistoric archaeological sites being discovered. In 1999, archaeological consultants from the Archaeological Research Center, California State University, Sacramento, conducted an archaeological field inventory of the project's area of potential effect. In 1999 and 2007, Caltrans archaeologists conducted additional surveys due to design modifications. In 2001, Caltrans conducted a Historic Study Report and an Extended Phase I Archaeological Study of the John Breen Adobe. Also in 2001, Foothill Resources, Ltd. and the Anthropological Studies Center, Sonoma State University, conducted a Historic Study Report/Phase II Archaeological Evaluation of the Breen Road Site.

In 2003, Caltrans contracted with Far Western Anthropological Research Group, Inc., to conduct a geo-archaeological study of the southern Santa Clara, Hollister, and San Juan valleys in Santa Clara and San Benito counties in an effort to obtain information on the potential of discovering buried archaeological deposits that might be present in the area of potential effect.

None of the research or surveys identified the presence of archaeological resources in the archaeological area of potential effect for the project.

Historic Properties

The architectural area of potential effect includes not only the area delineated by the archaeological area of potential effect, but also parcels (or portions of parcels) occupied by buildings and structures constructed in 1954 or earlier. Thirty-four properties were constructed prior to 1955 and the remaining properties were constructed after 1960. All of the historic-period resources within the limits of the architectural area of potential effect were evaluated for eligibility for listing in the National Register of Historic Places.

Identification of historic properties involved review and study of pertinent literature to date, including updates of National Register listings and appropriate inventories, as well as consultation with the San Benito County Historical Society and Mission San Juan Bautista. A records and literature search of the files at the Northwest Information Center of the California Historical Resources Information System was initially conducted in 1999. The record search area encompassed the project's area of potential effect as well as a one-mile radius beyond the area of potential effect. In 2003, an additional record search was conducted as part of the geo-archaeological study of the Southern Santa Clara, Hollister, and San Juan valleys.

Through a combination of this archival research, field investigations, and analysis, seven historic properties were identified. They are listed here in order of their occurrence, from west to east and are shown in Figure 2-1:

- The Benjamin Wilcox House, at 315 The Alameda, was listed in the National Register of Historic Places in February 1982. It is listed under Criterion C and at the local level of significance for its architectural merit as a representative of the Gothic Revival style of the late 1850s and a method of construction that combined timber framing with balloon framing, as well as an example of the work of a local master, George Chalmers.
- The Frank M. Avilla, Sr., House, at 411 The Alameda, was determined eligible for listing in the National Register of Historic Places on June 9, 2003, under Criterion C and at the local level of significance, for its architectural merit as an unusual example of the Craftsman style.
- The John Breen Adobe, at 120 Nyland Drive, was determined eligible for listing in the National Register of Historic Places on June 9, 2004 under Criterion B and at the local level of significance, for its association with John Breen and his family, the period of significance (1852-1939), and under Criterion C, at the local level of significance, as an example of a mid-19th century adobe ranch house. The residential landscaping surrounding the John Breen Adobe is considered an element that contributes to the resource's eligibility. In 1989, the John Breen Adobe was found eligible as an individual resource and as an element of a "John Breen Farm historic district." Additional research conducted in connection with the San Benito 156 Improvement Project, however, revealed that there was no justification for delineating a historic district, and the eligibility determination for the district was accordingly reversed on June 9, 2003 (the adobe remains eligible as an individual resource.)
- The former Ferry Morse Seed Company complex at 2191 San Juan Hollister Road (State Route 156), was determined eligible for listing in the National Register of Historic Places on June 9, 2003, under Criterion A, at the statewide level of significance. It is listed as a highly intact example of a significant production facility for one of the most important seed producers on the Pacific Coast during its era of significance (1910-1949). It is also eligible under Criterion C, at the local level of significance, for its association with renowned local architect, William Binder.
- The former San Justo School at 2981 San Juan Hollister Road (State Route 156), was determined eligible for listing in the National Register of Historic Places on June 9, 2003. The school was built in 1923, used from 1923 to 1968 (the period of

significance), and is now a private residence. The school building is eligible at the local level of significance under Criterion C, because it embodies the distinctive characteristics of the Spanish Colonial Revival style and because it represents the work of a local master architect, Ralph Wyckoff.

- The Mitchell Fruit Farm, at 3680 San Juan Hollister Road (State Route 156), was determined eligible for listing in the National Register of Historic Places on June 9, 2003, at the local level of significance, under Criterion A for its association with the development of the apricot industry in San Benito County, and under Criterion C as a representative example of an early apricot-processing facility.
- The Tebbetts Orchard/Nutting Property at 5070 San Juan Hollister Road (State Route 156) was determined eligible for listing in the National Register of Historic Places on June 9, 2003, at the local level of significance, under Criterion C for its architectural merit as an example of a rare double tankhouse type. The period of significance was determined to be 1917 to 1940.

Eligible Historic Properties

Number	A.P.N.	CULTURAL RESOURCES	Number	A.P.N.	CULTURAL RESOURCES
1	002-560-023	Benjamin Wilcox House 315 The Alameda	5	018-180-006	Ferry Morse Seed Company 2191 Route 156
2	018-170-021	Tebbets Orchard/Nutting Property 4070 San Juan Hollister Road	6	018-190-001	San Justo School 2981 Route 156
3	018-170-015	Mitchell Fruit Farm 3680 San Juan Hollister Road	7	002-530-012	Frank Avilla Sr House 411 The Alameda
4	012-130-028	John Breen Adobe 120 Nyland Drive			

Eligible Historic Properties
Existing State Route156
SBT-156-PM 3.0/8.2
05-344900

Figure 2-1 Historic Properties Map

Impacts

Archaeology

No impacts to archaeological resources are anticipated in connection with any of the proposed alternatives currently under discussion. Based on all available background information, previous studies within the area, and a geo-archaeological study of the project area, archaeological properties are not likely to be discovered during construction of this project.

Historic Properties

Ten Build Alternatives were developed and studied for the proposed project. All ten required purchasing new right-of-way from the northernmost edge of the 112.2-acre parcel occupied by the historic Ferry Morse Seed Company complex. Seven of the ten Build Alternatives were withdrawn because they did not avoid historic properties or they were not prudent and/or feasible. The three remaining Build Alternatives reflect Caltrans' efforts to avoid and minimize impacts to historic properties.

The proposed project would acquire a linear strip of land, a maximum width of 400 feet, at the northernmost edge of the former Ferry Morse Seed Company parcel. Over 70 percent of the parcel would remain untouched, including the historic Ferry Morse Seed Company complex and all the buildings in the complex. Alternative 2 would require approximately 33.4 acres; Alternative 4A would require 21.0 acres; and Alternative 6 would require 30.3 acres.

Caltrans has applied the Criteria of Adverse Effect set forth in 36 Code of Federal Regulations Section 800.5(a)(1), taking into account the views provided by consulting parties and the public to evaluate any effects the proposed project would have on the seven properties identified as eligible for the National Register of Historic Places. Public concerns expressed since the project was initiated have focused on preserving the rural character of the San Juan Valley area in general, and on preserving the former San Justo School, in particular. To date, no public comments have been received concerning possible effects to the Ferry Morse property.

Caltrans has determined, as a whole, the proposed project would have no adverse effect. Specifically, the proposed project would have no adverse effect on the Ferry Morse Seed Company, and no effect on the following six properties: the Benjamin Wilcox House; the Frank M. Avilla, Sr. House; the John Breen Adobe; the San Justo School; the Tebetts Orchard/Nutting Property; and the Mitchell Fruit Farm.

In April 2007, Caltrans consulted with the State Historic Preservation Office regarding a potential de minimis impact to one of the historic properties, the Ferry Morse Seed Company. The State Historic Preservation Office recommended a revision of the boundaries delineated for the historic property from the 112-acre legal property parcel to the more appropriate perimeter of a smaller 18-acre portion of the legal parcel, which is the portion occupied by the two dozen buildings making up the seed-processing complex. The State Historic Preservation Officer concurred with the new boundary determinations documented in the Caltrans correspondence dated April 27, 2007 (See Appendix E).

Avoidance, Minimization, and/or Mitigation Measures

Archaeology

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 were discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission, which would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact the Central Coast Specialist Branch, San Luis Obispo, so that they may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code Section 5097.98 are to be followed as applicable.

Historic Properties

All three proposed Build Alternatives reduce the Section 106 impacts as much as possible while still meeting the project Purpose and Need. Ten Build Alternatives were developed and studied for the proposed project, but seven were withdrawn because they did not avoid the historic properties or they were not prudent and/or feasible. The three remaining Build Alternatives reflect Caltrans' efforts to avoid and minimize impacts to historic properties.

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. Requirements for compliance are outlined in 23 Code of Federal Regulations Part 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

Caltrans completed a Location Hydraulic Study (February 2004) for the proposed project to identify and evaluate the base floodplain within the limits of the proposed project and address the flow of water as it affects the state highway, the base floodplain, and the surrounding area.

The U.S. Geological Survey classifies the proposed project area as the Central California Coastal Region Pajaro Watershed. This area of land, which drains across State Route 156, originates in the foothills and flows through the floor of the San Juan Valley on its way to the San Benito River. Three distinct sub-basins in the watershed drain across State Route 156.

The San Juan Canyon sub-basin measures approximately 10.5 square miles and is drained by the San Juan Creek. As the creek approaches the highway and city of San Juan Bautista, it is channeled, piped, and re-routed through the developed area.

The second sub-basin is the San Andreas Rift Zone, which measures approximately 12 square miles. This sub-basin starts at an elevation of approximately 2,700 feet and runs in a northwesterly direction toward the San Benito River. Farming operations have altered the surface of the sub-basin as it nears the valley floor.

The third sub-basin is the flatland north of the highway, which measures approximately 4.3 square miles. Water has historically drained toward the San Benito River and, therefore, away from the highway. Farming operations have altered this flow at several locations causing storm water to occasionally drain toward the highway.

This area has a long history of flooding compounded by the leveling of farmland. Hydrologic changes related to agricultural land use have altered the natural drainage patterns of the area. During the rainy season, some water appears to be intentionally drained to the highway by farmers, and creek beds have been destroyed in the lower elevations to maximize the amount of available farmland. These hydrologic changes, along with vegetation growth, choke the flow of water downstream of the San Juan Creek Bridge. The resulting backwater suppresses the flow of water in the area southeast of the Mission Vineyard Road/State Route 156 intersection. Water collects at the lowest ground elevation of 194 feet. The extremely high water table limits the depth of potential water storage basins, and a shallow impervious clay layer limits downward percolation. This action has resulted in extensive ponding (flooding) at the highway between Mission Vineyard Road and Lucy Brown Lane.

Impacts

Caltrans does not consider the proposed project to constitute a significant floodplain encroachment as defined in 23 Code of Federal Regulations, Section 650.105(q). No impact to the floodplain is expected. This project is within an area described by the Federal Emergency Management Agency as a floodplain, but with careful hydraulic engineering, the proposed project would not increase the base flood backwater elevations. The project would not support incompatible floodplain development, and there would be no substantial impact on natural and beneficial floodplain values. However, the risk of flood damage to adjacent property would continue because pre-construction hydrologic patterns would not be modified by the proposed project.

Floodplain mapping is located in the Location Hydraulic Study, which is available during the circulation period identified on the inside cover of this document and in Appendix K.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans intends to raise the highway profile above floodwater level and to remove highway runoff. This would make the highway safe from flooding but would not correct regional flooding problems. New cross-culverts would be required between Mission Vineyard Road and Lucy Brown Lane to mimic current flooding patterns now occurring at the highway. This project should also include the installation of a sufficient number of additional cross culverts to safely pass all water with the potential to back up against any proposed new alignments. Once construction details are prepared, a hydraulic analysis will assess any changes in profile grade and/or the widening of the highway profile that could result in changes to the existing flood zones.

All highway drainage would be disposed of via a new drainage collection system, and all offsite water would flow per the existing drainage patterns. The proposed sound wall would require special floodplain engineering consideration once sound wall placement is determined.

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 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 require a Storm Water Pollution Prevention Plan to be prepared and implemented during construction.

Affected Environment

Caltrans completed a Water Quality Assessment Report (April 2003) for the proposed project. The quality of water in an area depends upon several factors, including topography, geology, soils, groundwater, land use, climate, and precipitation.

This project area lies within the Coast Ranges Geomorphic Province in the San Benito Valley. Elevation at roadway level within the valley ranges from 195 to 250 feet. The San Andreas Rift Zone, the Gabilan Range, and the Diablo Range border the San Benito Valley. The surrounding mountains are oriented from northwest to southeast with elevations ranging from 2,000 to 5,000 feet.

Groundwater ranges from 10 to 35 feet below ground surface. Due to poor soil conditions and the presence of intermittent clay layers, drainage or infiltration is poor, causing waterlogged conditions.

No complete characterization of groundwater quality has been found in the published literature; however, incomplete water quality analysis indicates that the groundwater in the sub basin is somewhat hard and contains significant concentrations of sulfate and chloride. The ground water management plan for the San Benito County part of the Gilroy-Hollister groundwater basin states the groundwater quality is marginally acceptable for potable and irrigation use. Water quality constituents of greatest concern were salinity, nitrate, boron, and hardness.

Impacts

The project would not be expected to have short- or long-term impacts to surface water quality, because storm water runoff would not be directly discharged to a receiving water. In addition, short- and long-term impacts to groundwater would also not be expected because storm water runoff would likely be of better quality than the groundwater underlying the project area.

Total approximate acreage of new impervious (paved) surfaces as a result of the proposed project is provided in Table 2.8.

Table 2.8 Anticipated Paved Acreage and Storm Water Volumes

Anticipated Paved Acreage and Storm Water Volumes	Alternative		
	2	4A	6
Total length in miles	5.2	5.2	5.2
Total paved area in acres	88	54.6	74.4
Approximate Water Quality Volume in acre feet	3.48	1.96	2.83
Approximate Storm Water Quality Flow in Cubic Feet/Second (cfs)	13.2 cfs	7.5 cfs	10.8 cfs

cfs=cubic feet per second

In addition, the report completed for this project indicated that short-term surface water quality impacts are expected during construction but no groundwater impacts are expected. The short-term surface water quality impacts could include:

- Increases in sediments, turbidity (clarity), and total dissolved solids
- Toxicity due to chemical substances originating from construction activities
- Inadequate storm water drainage

Avoidance, Minimization, and/or Mitigation Measures

During construction, a Storm Water Pollution Prevention Plan would be implemented to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges. This plan would also describe and ensure the implementation of Best Management Practices to reduce or eliminate sediment and other pollutants in storm water as well as non-storm water discharges. By incorporating proper and accepted engineering practices and Best Management Practices, the proposed project would have minimal impacts to water quality during construction. Project-specific storm water Best Management Practices would be selected during the development of the Storm Water Pollution Prevention Plan, and are designed to satisfy National Pollutant Discharge Elimination System permit and Clean Water Act Best Conventional Technology/Best Available Technology requirements.

During the project development phase, plans are developed using the Caltrans Project Planning and Design Guide to ensure there would be no detrimental discharge into receiving waters. During the construction phase, the contractor is responsible, as stated in Caltrans' Standard Specifications Section 7-1.01G, for taking the necessary steps to eliminate potential impacts during construction.

Standard Specifications Section 7-1.01G requires the construction contractor to implement pollution control practices related to construction projects via a Water Pollution Control Program or a Storm Water Pollution Prevention Plan, as noted above.

The proposed project would disturb more than one acre of soil and the following would be required:

1. A Notification of Construction would be submitted to the appropriate Regional Water Quality Control Board at least 30 days before the start of construction. The Notification of Construction form requires a tentative start date and duration, location, description of project, estimate of affected area, and name of resident engineer (or other construction contact) with telephone number, etc.

2. A Storm Water Pollution Prevention Plan would be prepared and implemented during construction to the satisfaction of the resident engineer.

3. A Notice of Construction Completion would be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project will be considered complete when the criteria for final stabilization in the State General Construction Permit are met.

The primary pollutants of concern following construction are petroleum distillates and metals. A Storm Water Management Plan would be required to minimize long-term water quality impacts. Caltrans has currently implemented the statewide Storm Water Management Plan to address runoff impacts on water quality standards, development of Total Maximum Daily Loads, and watershed planning.

During the post-construction, long-term operational phase, and maintenance, permanent pollutant controls (design and treatment Best Management Practices) would be implemented to meet the Maximum Extent Practicable standard.

2.2.3 Geology/Soils/Seismic/Topograhy

Regulatory Setting

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

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans' Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. The current policy is to use the

anticipated Maximum Credible Earthquake from young faults in and near California. The Maximum Credible Earthquake is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

Affected Environment

Caltrans completed a Preliminary Geotechnical Report for this project in June 2002 to assess groundwater conditions. The report also discussed geology and seismicity.

The project area occurs within the Coast Ranges Geomorphic Province. It lies in the San Benito Valley, which is bounded to the southwest by the San Andreas Rift Zone and the Gabilan Range, and to the north and east by the Diablo Range. The San Benito River lies to the north of State Route 156.

The surrounding mountains are oriented from northwest to southeast. The elevation at roadway level in the project area ranges from 195 feet to 250 feet above sea level. The elevation of the surrounding mountains ranges from 2,000 feet to 5,000 feet above sea level.

Deposits near the surface within the project area are primarily Quaternary stream terrace deposits consisting of discontinuous layers of silts, sands, clays, and gravels. These deposits are underlain at depths of zero to 195 feet by the Pliocene Purisima Formation, which is similar to the overlying alluvium (material deposited by running water), but more consolidated. There is an exposure of Purisima Formation at the easterly end of the project, southeast of the highway alignment.

Although groundwater is high in some locations, cohesive soils predominate within the project limits. In most locations clay, silty clay, and clayey silt layers occur at or near the surface and extend to depths ranging from less that 1.5 feet to 26 feet. Muddy conditions and standing water are evident for many days after a substantial rainfall event.

Caltrans identified four faults near the project area: San Andreas/N. Sargent, Calaveras-Pacines-San Benito, and Zayante-Vergales. Geological maps show the San Andreas Fault crossing State Route 156 just east of The Alameda, at the beginning of the proposed project. According to the 2005 San Benito County Regional Transportation Plan, the San Andreas Fault was mapped from the northern portion of the county, a short distance east of Aromas, diagonally through the entire length of the county, passing immediately east of San Juan Bautista and emerging at the

southern border of the county, approximately 3.5 miles west of Priest Valley. The other faults range from 1.5 miles to 2.8 miles away from the project.

Impacts

The fault having the greatest potential to affect the project site is the San Andreas. The Maximum Credible Magnitude for an earthquake on the San Andreas Fault, as determined by Caltrans, is 8.0, and at a distance of 2,000 feet from the fault, the maximum credible bedrock acceleration in the project area due to an earthquake along this fault is .74 (gravity).

Liquefaction potential in the project area is expected to be low because cohesive soils are not normally susceptible to liquefaction. Liquefaction is a phenomenon that occurs when a sudden shock, or cyclic loading, causes soil pore pressure to temporarily increase until the effective pressure is zero, as occurs during an earthquake. Embankments founded on liquefiable soils may be subject to slope instability and settlement during an earthquake event. Earth-retaining structures may settle or overturn should the silts beneath them liquefy.

Avoidance, Minimization, and/or Mitigation Measures

Once a preferred alternative is selected and a rough profile grade has been established, a Geotechnical Design Report will be requested to determine final design recommendations. In addition, during the design phase of the project, consideration would be given to the stability and settlement of embankments, particularly at the approaches to structures. The subsurface clay layers are thick and extensive so settlement of the higher embankments may be substantial, and consolidation can be expected to occur over a long period of time. The near-surface soils can be saturated and soft, so the weight-bearing capacity of the foundation soil may be an issue during construction of the embankments.

Cumulative Impacts

The proposed project cannot avoid the San Andreas Fault because any east-west route crosses the fault, which runs diagonally through the entire San Benito County. However, the soil is not unstable and would not become unstable as a result of the project. The potential for offsite landslides, lateral spreading, subsidence, liquefaction or collapse is low.

2.2.4 Hazardous Waste Materials

Regulatory Setting

Many state and federal laws regulate hazardous materials and hazardous wastes. 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

Field investigations and a search of the Leaking Underground Storage Tank Information Systems (LUSTIS) and the VISTA Information Solutions, Inc. database were used to complete an Initial Site Assessment (January 2002), which identified the following potential hazardous waste sites:

- Nineteen registered and 10 unregistered underground storage tanks were identified within 1,000 feet of the project right-of-way. Only eight of the tanks (each with leaded, unleaded, or diesel fuel) were next to the proposed project area. No tanks are within the project area.
- Two investigations were completed for aerially deposited lead: one along the existing highway in the project area (February 1, 2001) and one within the area of the Build Alternatives (November 12, 2002). The soils from the proposed alternatives as a whole had less than the regulatory threshold level of 1,000 milligrams/kilogram. Based on the laboratory results, the soil can be handled without restrictions.
- Pesticide applications involving land acquired may be a concern for worker health and safety. Herbicides and pesticides applied to cropland have very short lives and do not pose a risk unless spilled in large quantities. No agri-chemical spills or accidents have been reported for land that may be acquired.

Impacts

After review of the VISTA Information Solutions, Inc. database, the Leaking Underground Storage Tank Information System, and field review, Caltrans determined:

- There are no substantial hazardous waste concerns with underground storage tanks.
- Aerially deposited lead samples are below regulatory threshold.
- No pesticide spills are on record.
- Hazardous waste would not pose a substantial risk to construction personnel or residents in the proposed construction area.

Avoidance, Minimization, and/or Mitigation Measures

The presence of lead in the soil is measurable but less than the regulatory threshold. However, project-specific Non-Standard Special Provisions for aerially deposited lead would be required in the construction contract and the contractor would provide a project-specific Lead Compliance Plan to address worker health and safety and to

prevent or minimize worker exposure to lead while handling material containing aerially deposited lead.

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 San Benito 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 "non-attainment" or "maintenance" for carbon monoxide (CO) and/or particulate matter. A region is a "non-attainment" 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 "non-attainment" 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

Caltrans prepared an Air Quality Study on December 29, 2004, which was updated in March 2007. The proposed project is located in the North Central Coast Air Basin, which consists of Monterey, Santa Cruz, and San Benito counties. A semi-permanent high-pressure cell over the eastern Pacific Ocean influences the project area's climate. The generally northwest-southeast orientation of the mountain ranges tends to restrict and channel the summer airflow. This airflow is occasionally reversed in a weak offshore movement, allowing pollutants to build up over a period of days. During the fall, north or easterly winds develop, often bringing in pollutants from California's Central Valley or from the San Francisco Bay area.

During the winter months, the high-pressure cell migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the San Benito Valley, especially during the night and morning hours. Northwest winds are still dominant during the winter, but easterly flow is more frequent. The general absence of deep, persistent inversions and the passage of the occasional storm systems usually result in good air quality during the winter and early spring.

Regional Air Quality Conformity

The Monterey Bay Unified Air Pollution Control District is the agency with jurisdictional control of the basin's air quality. The North Central Coast Air Basin is currently classified as "in attainment/unclassified" for all current federal air quality standards. Therefore, conformity requirements do not apply.

Project-Level Conformity

The State and federal standards and attainment status for priority pollutants for the North Central Coast Air Basin are summarized in Table 2.9.

Table 2.9 Attainment Status for San Benito County

Criteria Pollutant	Averaging Time	Federal Standard (National Ambient Air Quality Standards)	*Federal Attainment Status	State Standard	*State Attainment Status
Ozone (O_3)	1 Hour	---	Attainment/unclassified	0.09 ppm (180 ug/m^3)	Non-attainment/ transitional
	8 Hour	0.08 ppm (157 ug/m^3)		0.070 ppm (137 ug/m^3)	Not Available
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	35 ug/m^3	Attainment/unclassified	No Separate State Standard	Attainment
	Annual Arithmetic Mean	15 ug/m^3		12 ug/m^3	
Respirable Particulate Matter (PM_{10})	24 Hour	150 ug/m^3	Attainment/unclassified	50 ug/m^3	Non-attainment
	Annual Arithmetic Mean	---		20 ug/m^3	
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m^3)	Attainment/unclassified	9.0 ppm (10 mg/m^3)	Unclassified
	1 Hour	35 ppm (40 mg/m^3)		20 ppm (23 mg/m^3)	

*2006 State of California Air Resources Board
ppm = parts per million
ug/m^3= micrograms per cubic meter
mg/m^3=milligrams per cubic meter

The air pollutants of concern in the North Central Coast Air Basin are ozone (O_3), inhalable particles (PM_{10}), and carbon monoxide (CO).

- Ozone is composed of reactive organic gases and oxides of nitrogen that combine in the presence of sunlight. Ozone is the main constituent of smog. Reactive organic gas comes from the combustion of fossil fuels and from organic solvents. Major sources of fuel combustion are motor vehicles, the fuel industry, and power plants.
- Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles

10 microns or less in diameter are defined as "respirable particulate matter" or PM_{10}. Fine particles are 2.5 microns or less in diameter ($PM_{2.5}$) and can contribute to regional haze and reduction of visibility in California.

San Benito County is currently classified as "Attainment/unclassified" for all federal ambient air quality standards. The County, however, for State ambient air quality standards, is only classified "Attainment" for fine particulate matter ($PM_{2.5}$). It is classified "Non-attainment" for ozone (O_3) and respirable particulate matter (PM_{10}), and "Unclassified" for carbon monoxide (CO).

Ambient air quality for the project area was monitored at the Hollister, California monitoring station and the data was used for a qualitative analysis for ozone and particulate matter measuring 10 microns and smaller. The latest version of the data available is dated March 15, 2006 and covered the 3-year period from 2003 through 2005.

Ozone Analysis

The project is located in an "attainment/unclassified" area for ozone for federal standards; therefore, federal conformity is not required. The project is in a "non-attainment-transitional" area for 1-hour State standards. There is currently no 8-hour State standard. The monitoring station in Hollister, California did not register any violation of the ozone national standard during the three years from 2003 through 2005.

Particulate Matter (PM_{10}) Analysis

The project is located in an "attainment/unclassified" area for particulate matter that is 10 microns or less in diameter for federal standards; therefore, federal conformity is not required. The project is in a "non-attainment" area for State standards.

Because the U.S. Environmental Protection Agency has not released modeling guidance on how to perform quantitative particulate matter hot spot analysis, such analysis is not currently required. For the qualitative analysis, the monitoring station in Hollister, California did not register any violation of the PM_{10} national standard during the three years from 2003 through 2005.

Particulate Matter ($PM_{2.5}$) Analysis

The project is located in an "attainment/unclassified" area for federal standards and in an "attainment" area for state standard for fine particulate matter ($PM_{2.5}$); therefore, no further analysis is needed.

CO Hot Spot Analysis

The project is located in an "attainment/unclassified" area for federal standards and in an "unclassified" area for state standards for carbon monoxide (CO); therefore, no further analysis is needed.

In addition to the criteria pollutants discussed above, the U.S. Environmental Protection Agency also regulates air toxics, including particulate matter contained in diesel exhaust. Diesel engine exhaust contains a complex mixture of gases and particulates that have raised concerns about their potential for adverse health effects. Human exposure to diesel engine exhaust comes from both highway and non-highway sources. Studies of the risks are inconclusive, however, and the Environmental Protection Agency has yet to establish air quality standards or guidelines for assessing the project level effects of mobile air toxics. Such limitations make the study of mobile air toxic concentrations, exposures, and health impacts difficult and uncertain, especially on a quantitative basis.

Asbestos

The California Environmental Quality Act requires that environmental documents address human exposure to both naturally occurring and structural airborne asbestos. The U.S. Environmental Protection Agency, the California Air Resources Board, and most air pollution control districts regulate asbestos as an airborne toxic material. According to the Caltrans technical reports for air quality and hazardous waste, there is no known naturally occurring asbestos or structural asbestos found within the project limits.

Impacts

The project is not expected to create carbon monoxide hotspots or increase the levels of carbon monoxide because the project would provide additional travel lanes and passing opportunities, which would increase the level of service and reduce slow-moving traffic. The project would relieve congestion and provide upgraded intersections, which would reduce idling time; therefore, providing an overall air quality benefit. Based on the data available, the project would not create a new violation or worsen an existing violation of the state standards for ambient air quality.

Construction

Project construction would take approximately 24 months. There would be a temporary increase in air emissions during the construction period. The Monterey Bay Unified Air Pollution Control District requires the calculation of inhalable

particulate matter (PM_{10}) emissions from construction activities and includes emissions of ozone precursors (oxides of nitrogen and reactive organic gases) in its emissions inventory.

Air pollutants come from three sources on a construction project: the vehicles doing the construction, the application of asphalt products, and construction grading. Asphalt application is not discussed because the emissions from asphalt are reactive organic compounds (ROCs) that are already accounted for by the Monterey Bay Unified Air Pollution Control District.

The County considers emissions, including construction emissions, of greater than 82 pounds per day of PM_{10} to be an adverse effect. Projects that grade more than 2 acres per day have the potential to exceed the 82 pounds per day limit. Based on the preliminary project plans, the maximum area that the project would disturb is 173 acres or an approximate average daily grading of 1.3 acres; therefore, the project would be within the 2-acres per day limit and not expected to produce emissions greater than the 82 pounds per day limit. The project is not expected to exceed the thresholds for other construction emissions established by the air pollution control district. See Appendix H.

Caltrans has calculated the emissions expected from grading and summarized the results in Table 2.10.

Table 2.10 Estimated Construction Emissions from Grading

Air Pollution Control District's Threshold Daily Pounds	Air Pollution Control District's Threshold Quarterly Pounds	Alternative (Quarterly tons and daily pounds of PM_{10})*		
		2	**4A**	**6**
	2.5 tons	1.5 tons	1.0 tons	1.5 tons
82		49 pounds	32 pounds	49 pounds

*At 38 pounds per acre per day, 66 days grading/quarter

Avoidance, Minimization, and/or Mitigation Measures

The daily and quarterly grading acreage and emissions from fugitive dust appear to be within the limits established by the Monterey Bay Unified Air Pollution Control District. The District recommends the following minimization measures, (in addition to daily watering of all disturbed areas required by Caltrans Standard Specifications):

- Water all active construction areas at least twice daily (frequency should be based on the type of operation, soil, and wind exposure)

- Prohibit all grading activities during periods of high wind (over 15 miles per hour)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro-seed area
- Maintain at least 2.0 feet of "freeboard" (space between the surface of the load and top of the truck bed) on haul trucks
- Cover all trucks that haul dirt, sand, or loose materials
- Cover inactive storage piles
- Sweep streets if visible soil is carried out from the construction site
- Plant windbreaks on the windward side of construction projects adjacent to open land (consult with project biologist prior to plant selection)
- Plant vegetative cover in disturbed areas as soon as possible (consult with project biologist prior to plant selection)
- Limit the area under construction at any one time

Applications of appropriate measures from this list can further reduce emissions of fugitive dust from the project.

The contractor would use on-road diesel fuel approved by the California Air Resources Board in diesel construction vehicles when it is locally available.

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. Typical dust and emission control methods include watering the construction site, runoff and erosion control, traps on diesel-exhaust systems, and emission-control retrofits on older, higher polluting vehicles. These impacts are addressed through Caltrans Standard Specifications, Section 7-1.0F, "Air Pollution Control" and Section 10, "Dust Control."

The Monterey Bay Unified Air Pollution Control District administers air quality regulations developed at the federal, state, and local levels. According to Caltrans Standard Specifications that may apply to all state construction projects, the contractor must comply with Monterey Bay Unified Air Pollution Control District's rules, ordinances, and regulations.

2.2.6 Noise

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 no-build versus build analysis to assess whether a proposed project will 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. The rest of this section will focus on the National Environmental Policy Act-23 Code of Federal Regulations Part 772 noise analysis; please see Chapter 3 for further information on noise analysis under the California Environmental Quality Act.

National Environmental Policy Act and 23 Code of Federal Regulations Part 772

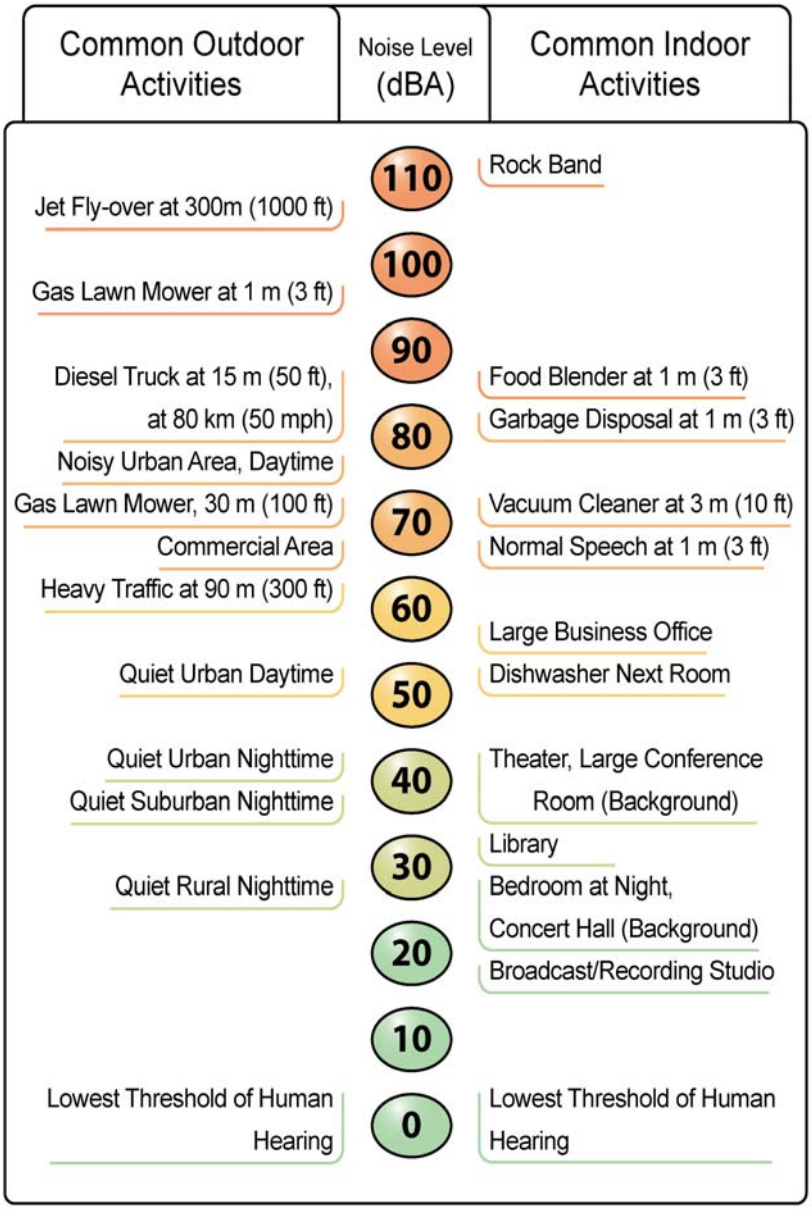
For highway transportation projects with Federal Highway Administration (and Caltrans, as assigned) involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 Code of Federal Regulations Part 772) govern the analysis and abatement of traffic noise impacts. The regulations 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 Part 772 analysis, and Table 2.12 shows the noise levels of typical activities.

Table 2.11 Activity Categories and Noise Abatement Criteria

Activity Category	Noise Abatement Criteria, A-weighted Noise Level (dBA), 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, 2006
*A-weighted decibels (dBA) 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.

Table 2.12 Typical Noise Levels



In accordance with Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, 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 (see Table 2.11). 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.

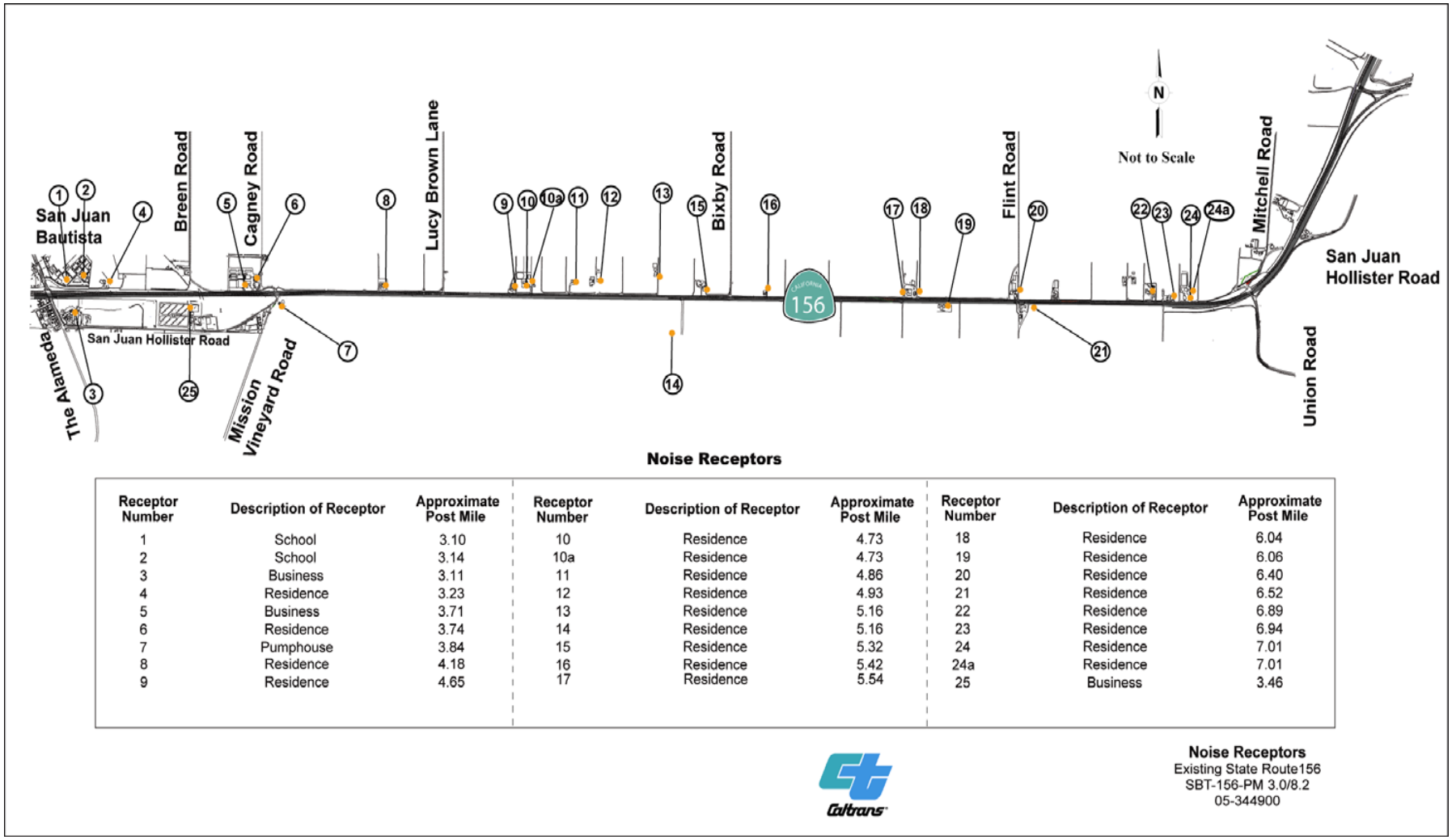
Affected Environment

Caltrans completed a Noise Study (June 2002), which was updated in May 2007.

The project is in the San Juan Valley where the terrain is relatively flat with elevations sloping from 252 feet mean sea level on the east to 195 feet mean sea level on the west. The majority of the project's area consists of rural residential/farmhouses and developed agricultural properties or farms. Within the city limits of San Juan Bautista at the beginning of the project, the San Juan Elementary School, several commercial businesses, some undeveloped open fields, and the Mission RV Park border the highway.

Current noise levels at peak hours of traffic were measured for receptors along the project route using the Sound 32 traffic noise prediction program. The Sound 32 program is compatible with the Federal Highway Administration 77-RD-109 Model.

Caltrans identified 25 receptors, which were chosen to represent other sensitive receptors that could be affected by the proposed project. Receptors 10 and 24 include an additional structure labeled 10a and 24a respectively. The receptors and their location are shown in Figure 2-2. Tables 2.13, 2.14, and 2.15 show the existing (2005) noise levels for the three Build Alternatives at existing receptors in the project area.



Noise Receptors

Receptor Number	Description of Receptor	Approximate Post Mile	Receptor Number	Description of Receptor	Approximate Post Mile	Receptor Number	Description of Receptor	Approximate Post Mile
1	School	3.10	10	Residence	4.73	18	Residence	6.04
2	School	3.14	10a	Residence	4.73	19	Residence	6.06
3	Business	3.11	11	Residence	4.86	20	Residence	6.40
4	Residence	3.23	12	Residence	4.93	21	Residence	6.52
5	Business	3.71	13	Residence	5.16	22	Residence	6.89
6	Residence	3.74	14	Residence	5.16	23	Residence	6.94
7	Pumphouse	3.84	15	Residence	5.32	24	Residence	7.01
8	Residence	4.18	16	Residence	5.42	24a	Residence	7.01
9	Residence	4.65	17	Residence	5.54	25	Business	3.46

Caltrans

Noise Receptors
Existing State Route156
SBT-156-PM 3.0/8.2
05-344900

Figure 2-2 Noise Receptors

Table 2.13 2005 Existing and 2030 Predicted Noise Levels—Alternative 2

Receptor Number	2005 Existing (dBA Leq)	2030 No-build Predicted (dBA Leq)	2030 Build Predicted (dBA Leq)	Predicted Noise Level with Barriers of Varying Heights (feet)									Reasonable	Feasible
				8	9	10	11	12	13	14	15	16		
1	64	67	**67**	School requested no barriers									n/a	n/a
2	64	67	**67**											
3	64	67	**67**	Commercial property no barriers									n/a	n/a
4	70	73	**70**	-	-	69	69	69	68	68	67	67	n/a	NO
5	69	72	**69**	-	-	66	66	66	65	65	65	**64**	NO	YES
6	66	69	**66**	-	-	64	63	63	62	62	62	**61**	NO	YES
7	-	-	-	Right-of-Way Acquisition									n/a	n/a
8	69	72	**67**	64	64	63	63	**62**	62	62	61	-	NO	YES
9	69	72	**67**	64	64	63	63	**62**	62	62	61	-	NO	YES
10	69	72	**67**	64	64	63	63	**62**	62	62	61	-	NO	YES
10a	69	72	**67**	64	64	63	63	**62**	62	62	61	-	NO	YES
11	64	67	64	-	-	-	-	-	-	-	-	-	n/a	n/a
12	64	67	64	-	-	-	-	-	-	-	-	-	n/a	n/a
13	62	65	62	-	-	-	-	-	-	-	-	-	n/a	n/a
14	58	61	63	-	-	-	-	-	-	-	-	-	n/a	n/a
15	74	77	**67**	64	63	63	**62**	61	61	60	60	60	NO	YES
16	74	77	**67**	64	63	63	**62**	61	61	60	60	60	NO	YES
17	74	77	64	-	-	-	-	-	-	-	-	-	n/a	n/a
18	74	77	64	-	-	-	-	-	-	-	-	-	n/a	n/a
19	73	76	**68**	65	64	64	63	**63**	63	62	62	-	NO	YES
20	73	76	64	-	-	-	-	-	-	-	-	-	n/a	YES
21	73	76	**68**	65	64	64	63	**63**	63	62	62	-	NO	YES
22	69	72	**67**	64	64	63	62	**62**	61	61	61	-	NO	YES
23	75	78	**70**	67	67	66	66	**65**	65	65	64	-	NO	YES
24	75	78	**70**	67	67	66	66	**65**	65	65	64	-	NO	YES
24a	75	78	**70**	67	67	66	66	**65**	65	65	64	-	NO	YES
25	67	70	**71**	67	**66**	66	65	65	64	64	64	-	YES	YES

Highlights indicate 5-dBA attenuation (+/-60 degree exposure angle)

Table 2.14 2005 Existing and 2030 Predicted Noise Levels—Alternative 4A

Receptor Number	2005 Existing (dBA Leq)	2030 No-build Predicted (dBA Leq)	2030 Build Predicted (dBA Leq)	Predicted Noise Level with Barriers of Varying Heights (feet)									Reasonable	Feasible
				8	9	10	11	12	13	14	15	16		
1	64	67	**67**	School requested no barriers									n/a	n/a
2	64	67	**67**											
3	64	67	**67**	Commercial property no barriers									n/a	n/a
4	70	73	70	-	-	69	69	69	68	68	67	67	n/a	NO
5	69	72	69	-	-	66	66	66	65	65	65	**64**	NO	YES
6	66	69	66	-	-	64	63	63	62	62	62	**61**	NO	YES
7	-	-	-	Right-of-Way Acquisition									n/a	n/a
8	69	72	68	64	64	**63**	63	62	62	62	61	-	NO	YES
9	69	72	68	64	64	**63**	63	62	62	62	61	-	NO	YES
10	69	72	68	64	64	**63**	63	62	62	62	61	-	NO	YES
10a	69	72	68	64	64	**63**	63	62	62	62	61	-	NO	YES
11	64	67	65	-	-	-	-	-	-	-	-	-	n/a	n/a
12	64	67	65	-	-	-	-	-	-	-	-	-	n/a	n/a
13	62	65	62	-	-	-	-	-	-	-	-	-	n/a	n/a
14	58	61	63	-	-	-	-	-	-	-	-	-	n/a	n/a
15	74	77	69	66	65	65	**64**	64	63	63	63	63	NO	YES
16	74	77	69	66	65	65	**64**	64	63	63	63	63	NO	YES
17	74	77	65	-	-	-	-	-	-	-	-	-	n/a	n/a
18	74	77	65	-	-	-	-	-	-	-	-	-	n/a	n/a
19	73	76	69	65	64	**64**	63	63	63	62	62	-	NO	YES
20	73	76	64	-	-	-	-	-	-	-	-	-	n/a	YES
21	73	72	69	65	64	**64**	63	63	63	62	62	-	NO	YES
22	69	78	68	64	64	**63**	62	62	61	61	61	-	NO	YES
23	75	78	72	**67**	67	66	66	65	65	65	64	-	NO	YES
24	75	78	72	**67**	67	66	66	65	65	65	64	-	NO	YES
24a	75	78	72	**67**	67	66	66	65	65	65	64	-	NO	YES
25	67	73	71	67	**66**	66	65	65	64	64	64	-	YES	YES

Highlights indicate 5-dBA attenuation (+/-60 degree exposure angle)

Table 2.15 2005 Existing and 2030 Predicted Noise Levels—Alternative 6

Receptor Number	2005 Existing (dBA Leq)	2030 No-build Predicted (dBA Leq)	2030 Build Predicted (dBA Leq)	Predicted Noise Level with Barriers of Varying Heights (feet)									Reasonable	Feasible
				8	9	10	11	12	13	14	15	16		
1	64			School requested no barriers									n/a	n/a
2	64													
3	64			Commercial property no barriers									n/a	n/a
4	70	73	70	-	-	69	69	69	68	68	67	67	n/a	NO
5	69	72	69	-	-	66	66	66	65	65	65	**64**	NO	YES
6	66	69	66	-	-	64	63	63	62	62	62	**61**	NO	YES
7	-	-	-	Right-of-Way Acquisition									n/a	n/a
8	69	72	67	64	64	63	63	**62**	62	62	61	-	NO	YES
9	69	72	67	64	64	63	63	**62**	62	62	61	-	NO	YES
10	69	72	67	64	64	63	63	**62**	62	62	61	-	NO	YES
10a	69	72	67	64	64	63	63	**62**	62	62	61	-	NO	YES
11	64	67	65	-	-	-	-	-	-	-	-	-	n/a	n/a
12	64	67	65	-	-	-	-	-	-	-	-	-	n/a	n/a
13	62	65	63	-	-	-	-	-	-	-	-	-	n/a	n/a
14	58	61	63	-	-	-	-	-	-	-	-	-	n/a	n/a
15	74	77	68	65	64	64	**63**	63	62	62	62	62	NO	YES
16	74	77	68	65	64	64	**63**	63	62	62	62	62	NO	YES
17	74	77	65	-	-	-	-	-	-	-	-	-	n/a	n/a
18	74	77	65										n/a	n/a
19	73	76	68	65	64	64	63	**63**	63	62	62	-	NO	YES
20	73	76	64	-	-	-	-	-	-	-	-	-	n/a	YES
21	73	72	68	65	64	64	63	**63**	63	62	62	-	NO	YES
22	69	78	67	64	64	63	62	**62**	61	61	61	-	NO	YES
23	75	78	71	67	67	66	**66**	65	65	65	64	-	NO	YES
24	75	78	71	67	67	66	**66**	65	65	65	64	-	NO	YES
24a	75	78	71	67	67	66	**66**	65	65	65	64	-	NO	YES
25	67	73	71	67	**66**	66	65	65	64	64	64	-	YES	YES

Highlights indicate 5-dBA attenuation (+/-60 degree exposure angle)

Impacts

Tables 2.13 through 2.15 also show predictions of future peak hour noise levels for the year 2030, with and without the project. The results of the analysis showed that the three Build Alternatives affected the same receptors similarly, but the predicted noise levels differed slightly.

Seven of the 27 receptors would not experience traffic noise impacts approaching or exceeding the acceptable level for outdoor residential noise abatement (67 decibels) for any of the Build Alternatives. These receptors are 11 through 14, 17, 18, and 20. Receptor 7 is not a sensitive receptor (water pump house) and would be acquired for the construction project.

The remaining 19 receptors would experience traffic noise impacts approaching or exceeding the acceptable level for outdoor residential noise abatement (67 decibels) from all Build Alternatives. These receptors are 1 through 6, 8 through 10a, 15, 16, 19, and 21 through 25.

Construction

It is inevitable that most of the residences will experience an increase in noise levels in the vicinity of the project due to construction activities. Night construction is expected for the project, and there would be an increased potential for noise impacts on neighboring areas. Specific information on noise from night construction such as hours of impact or decibel level restrictions will be provided at a later stage. Project construction is expected to last about two years.

Noise produced by construction equipment would occur with varying intensity and duration during the various phases of construction. Table 2.16 shows the range of noise emissions from various types of construction equipment at a distance of 50 feet. Temporary barriers can be effective for residences within 200 feet of the right-of-way line. Pile driving is a construction method that generates higher than normal noise levels, as shown in Table 2.16. A pile driver could be used when the San Juan Creek Bridge, at Breen Road, is expanded or replaced.

Table 2.16 Construction Equipment Noise Ranges

Equipment Type	Average Noise Level (dBA) at 50 feet
Pile Driver	100
Dump Truck	80
Front Loader	80
Backhoe	79
Excavator	76
Dozer	71
Compressor	74
Pump	70

Sources: U.S. Army Corps of Engineers, Noise Control: Pile Driver Demonstration Project

Avoidance, Minimization, and/or Abatement Measures Under the National Environmental Policy Act

Caltrans' *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasible means that when the barrier is constructed at the height and length recommended the barrier would reduce local noise levels by 5 decibels or more.

Abatement is considered reasonable if a cost/benefit analysis indicates it to be a prudent expenditure of public funds. Whether or not the recommended sound abatement is a reasonable expenditure will be determined by comparing the reasonable costs to the engineer's estimate for each barrier. The total cost allowance, calculated in accordance with Caltrans' *Traffic Noise Analysis Protocol*, is $44,000 per residence benefited.

The Project Development Team and the concerned residents also have a voice in whether or not sound barriers determined to be a reasonable expenditure are actually constructed. Tables 2.13 through 2.15 show the noise reduction achieved from barriers of varying heights and whether the abatement was determined reasonable and feasible.

Receptors 1 and **2** represent the San Juan Elementary School. Discussions between Caltrans and officials from the San Juan Elementary School revealed that the school does not want barriers constructed along existing State Route 156. **Receptor 3**, the San Juan Inn, is a commercial establishment, and Caltrans does not generally provide noise abatement for commercial receptors. Noise abatement is not feasible for **Receptor 4**, the Breen Adobe.

Caltrans determined sound abatement was feasible for the remaining 15 receptors identified for all Build Alternatives, but only reasonable for **Receptor 25**.

Barrier 1 would abate noise at **Receptors 5** and **6**, which represent two homes located at the intersection of Cagney Road and Breen Road, slightly north of State Route 156. The existing noise level at Receptor 5 is 69 decibels and the future noise level for all the Build Alternatives is predicted to be 69 decibels. The existing noise level at Receptor 6 is 66 decibels and the future noise level for all the Build Alternatives is predicted to be 66 decibels. To achieve a 5-decibel reduction, for all the Build Alternatives, a sound wall 16 feet high and 630 feet long would be needed. The current estimated cost of the wall is $285,700. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 2 would abate noise at **Receptor 8**, which represents one residence located midway between Cagney Road and Lucy Brown Lane on the north side of State Route 156. The existing noise level at Receptor 8 is 69 decibels and the future noise level is predicted to be 67 decibels for Alternatives 2 and 6, and 68 decibels for Alternative 4A. To achieve a 5-decibel reduction, a sound wall 12 feet high for all the Build Alternatives would be needed. The recommended length of the wall for Alternative 2 is 840 feet long at a current estimated cost of $289,400. The recommended length of the wall for Alternative 4A is 670 feet at a current estimated cost of $230,800. The recommended length of the wall for Alternative 6 is 840 feet long at a current estimated cost of $289,400. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 3 would abate noise at **Receptors 9, 10**, and **10a**, which represent three homes located east of Lucy Brown Lane on the north side of State Route 156. The existing noise level at Receptors 9, 10, and 10a is 69 decibels and the future noise level is predicted to be 67 decibels for Alternatives 2 and 6, and 68 decibels for Alternative 4A. To achieve a 5-decibel reduction, a sound wall 12 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 1,320 feet long at a current estimated cost of $454,500. The recommended length of the wall for Alternative 4A is 780 feet at a current estimated cost of $268,600. The recommended length of the wall for Alternative 6 is 760 feet long at a current estimated cost of $261,700. Because the estimated cost of the barrier exceeds the total

cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 4 would abate noise at **Receptor 15**, which represents one home located west of Bixby Road at State Route 156. The existing noise level at Receptor 15 is 74 decibels and the future noise level is predicted to be 67 decibels for Alternative 2, 69 decibels for Alternative 4A, and 68 decibels for Alternative 6. To achieve a 5-decibel reduction, a sound wall 11 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 860 feet long at a current estimated cost of $278,200. The recommended length of the wall for Alternative 4A is 680 feet at a current estimated cost of $240,000. The recommended length of the wall for Alternative 6 is 840 feet long at a current estimated cost of $296,500. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 5 would abate noise at **Receptor 16**, which represents one home located east of Bixby Road at State Route 156. The existing noise level at Receptor 16 is 74 decibels and the future noise level is predicted to be 67 decibels for Alternative 2, 69 decibels for Alternative 4A, and 68 decibels for Alternative 6. To achieve a 5-decibel reduction, a sound wall 11 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 710 feet long at a current estimated cost of $229,800. The recommended length of the wall for Alternative 4A is 560 feet at a current estimated cost of $197,700. The recommended length of the wall for Alternative 6 is 700 feet long at a current estimated cost of $247,200. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 6 would abate noise at **Receptor 19**, which represents one home located west of Flint Road on the south side State Route 156. The existing noise level at Receptor 19 is 73 decibels and the future noise level is predicted to be 68 decibels for Alternatives 2 and 6, and 69 decibels for Alternative 4A. To achieve a 5-decibel reduction, a sound wall 12 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 480 feet long at a current estimated cost of $136,900. The recommended length of the wall for Alternative 4A is 580 feet at a current estimated cost of $165,400. The recommended length of the wall for Alternative 6 is 440 feet long at a current estimated cost of $125,500. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 7 would abate noise at **Receptor 21**, which represents one home located on the south side of State Route 156 at Flint Road. The existing noise level at Receptor 21 is 73 decibels and the future noise level is predicted to be 68 decibels for Alternatives 2 and 6, and 69 decibels for Alternative 4A. To achieve a 5-decibel reduction, a sound wall 12 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 510 feet long at a current estimated cost of $145,400. The recommended length of the wall for Alternative 4A is 640 feet at a current estimated cost of $182,500. The recommended length of the wall for Alternative 6 is 480 feet long at a current estimated cost of $136,900. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 8 would abate noise for **Receptors 22, 23, 24**, and **24a**, which represent four homes located on the north side of State Route 156 east of Central Avenue. The existing noise level at Receptor 22 is 69 decibels and the future noise level is predicted to be 67 decibels for Alternatives 2 and 6, and 68 decibels for Alternative 4A. The existing noise level at Receptors 23, 24, and 24a is 75 decibels and the future noise level is predicted to be 70 decibels for Alternative 2, 72 decibels for Alternative 4A, and 71 decibels for Alternative 6. To achieve a 5-decibel reduction, a sound wall 12 feet high for all the Build Alternatives is needed. The recommended length of the wall for Alternative 2 is 1,300 feet long at a current estimated cost of $468,000. The recommended length of the wall for Alternative 4A is 1,280 feet at a current estimated cost of $460,800. The recommended length of the wall for Alternative 6 is 1,330 feet long at a current estimated cost of $457,950. Because the estimated cost of the barrier exceeds the total cost allowance, the construction of a barrier at this location is considered unreasonable.

Barrier 9 would abate noise for **Receptor 25**, the Mission Farm RV Park located at 400 San Juan-Hollister Road. For facilities like this one, each 100 front feet (along the highway) counts as a residential equivalent. The facility has approximately 656 feet of frontage on State Route 156; therefore, this receptor represents seven residential equivalents. The existing noise level at Receptor 25 is 67 decibels and the future noise level is predicted to be 71 decibels for all the Build Alternatives. To achieve a 5-decibel reduction, a sound wall 9 feet high would be needed for all Build Alternatives. The recommended length of the wall for Alternative 2 is 940 feet long at a current estimated cost of $270,700. The recommended length of the wall for Alternative 4A is 800 feet at a current estimated cost of $230,400. The recommended length of the wall for Alternative 6 is 870 feet long at a current estimated cost of

$250,600. Because the estimated cost of the barrier does not exceed the total cost allowance, the construction of a barrier at this location is considered reasonable.

Based on the studies completed to date, Caltrans intends to incorporate noise abatement in the form of a barrier at the Mission Farm RV Park. Due to the drainage ditch and redwood trees within the existing right-of-way, the sound barrier would be placed on top of a retaining wall. If during final design, conditions have substantially changed, noise abatement may not be necessary. The final decision on noise abatement will be made on completion of the project design and the public involvement processes.

Several methods are proposed in the Federal Highway Administration's *Highway Noise Manual* for dealing with construction noise. Methods that could be applicable to this project include the following:

- Keep the public advised of high noise level operations through media announcements.
- When applicable, use temporary noise barriers, which may be effective in minimizing construction noise, dust, glare, and visual impacts.
- Install special telephones in the resident engineer's office to receive noise complaints. The telephone numbers would be publicized in local newspapers and by letter to residences near the construction area. Studies show the public is more tolerant of short-term noise if construction schedules are publicized well in advance because residents can adjust their schedules in advance for a few noisy nights.
- When possible, schedule noisier operations in daylight hours when they are least likely to disturb local residents or businesses.
- Minimize nighttime construction.
- When possible, construct proposed barriers before the construction project begins, which would also protect residents from construction noise, dust, and glare.

Cumulative Impacts

The proposed project would not contribute to a significant cumulative adverse impact but may actually decrease noise levels within the project limits. Except for one mile within San Juan Bautista's city limits, the majority of the proposed project would be constructed in an area that is primarily rural where noise receptors are scattered throughout the area. The noise study determined that the predicted noise levels in the year 2030 for all the Build Alternatives would be less than the predicted noise levels (2030) without the project except for Receptor 25, which is an RV park within the

city limits. The Noise Study also determined that sound abatement would decrease the noise levels for Receptor 25 below the noise abatement criterion for outdoor residential uses (67 decibels).

2.3 Biological Environment

Caltrans biologists prepared a Natural Environment Study for the project in March 2007. The study provides information needed to comply with a variety of state and federal laws, regulations, and executive orders relating to the natural environment. Potential effects on natural resources, including federal and state special-status species and their habitats, were analyzed.

Caltrans biologists searched the California Natural Diversity Data Base Rarefind (San Juan Bautista, Hollister, Watsonville East, Prunedale, Salinas, Natividad, Mr. Harlan, Paicines, Tres Pinos, Three Sisters, San Felipe, and Chittenden U.S. Geological Survey Quadrangles), examined topographical maps, and conducted field surveys to determine the potential impacts of this project on the biological resources of the area.

2.3.1 Natural Communities

Regulatory Setting

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

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in Threatened and Endangered Species, Section 2.3.5. Wetlands and other waters are discussed in Section 2.3.2.

Affected Environment

The project runs through the San Juan Valley where agriculture is the dominant land use. The project area consists of row crops and orchards with some rural residential/farmhouses along the highway.

The biological study area (see Figure 2-3) is primarily non-native grasslands, which consist of non-native ruderal grasses, wild oats, Italian thistle, black mustard, cockle burr, fiddleneck, long-beaked filaree, burr clover, scarlet pimpernel, California

poppy, and plantain. Along the San Juan Creek there is some riparian scrub habitat consisting of primarily nettles and willows. The dominant plant species are ruderal grasses and non-native thistles. Ruderal refers to disturbed areas, such as unpaved highway shoulders, with mostly weedy species.

Impacts

No natural communities of concern would be impacted by the project.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are necessary.

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 U.S. 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 2.2.2).

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 (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 will 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 will be required. California Department of Fish and Game jurisdictional limits are usually defined by the tops of the stream or lake banks, or by 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

Caltrans biologists delineated wetlands and other waters of the U.S. on July 17, 2003 and July 23, 2003. No wetlands were identified within the project limits.

The only waters of the U.S. that occur within the project limits are within the San Juan Creek watershed. Sections of the creek upstream and downstream from State Route 156 have been realigned and are sparsely vegetated with willows, nettles, reed, and thistles. A large drainage ditch, known as the “east ditch,” enters the highway right-of-way near Mission Vineyard Road from the southeast. It then turns west and parallels the highway for a distance of approximately 1,273 feet before flowing into San Juan Creek just upstream of the San Juan Creek bridge. Another smaller ditch, known as the “west ditch,” runs parallel to and south of the highway from The Alameda for about 256 feet to the east before it crosses the highway via a culvert. A wetland is located at the outlet of the culvert, but it is outside the project limits.

Impacts

All Build Alternatives would require a small amount of fill to be placed into waters of the U.S. in construction of the bridge over San Juan Creek resulting in permanent impacts. Caltrans considered these impacts to waters of the U.S. Table 2.17 shows both temporary and permanent impacts.

Table 2.17 Impacts to Waters of the U.S.

Impacts	Alternative		
	2	4A	6
Temporary	0.23 acre	0.23 acre	0.23 acre
*Permanent	0.01 acre	0.01 acre	0.01 acre
Total area	0.24 acre	0.24 acre	0.24 acre

* This impact is the maximum dependent on the bridge widening design chosen

Avoidance, Minimization, and/or Mitigation Measures

No wetlands were found within the proposed project area, but wetlands were identified next to State Route 156 north of the existing route. Environmentally Sensitive Area fencing would be placed around those wetlands to ensure that there would be no impacts to that area.

A nationwide Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers, a Section 401 Certification from the Regional Water Quality Control Board, and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game would be required for all Build Alternatives.

2.3.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Game share regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special-status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act and/or the California Endangered Species Act. Please see Threatened and Endangered Species, Section 2.3.5, in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including California Department of Fish and Game fully protected species and species of special concern, U.S. Fish and Wildlife Service candidate species, and non-listed California Native Plant Society rare and endangered plants.

The regulatory requirements for the Federal Endangered Species Act can be found at U.S. Code 16, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. The regulatory requirements for the California Endangered Species Act can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Sections 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

Caltrans biologists conducted field surveys on April 23, 2004 and July 16, 2004 to identify plant species within the project area.

Two plants with potential to occur in the project area, the Congdon's tarplant and the round-leaved filaree, are listed as California Native Plant Society special-status plant species. The Congdon's tarplant grows in alkaline areas of the valley and foothill grasslands. The round-leaved filaree grows in cismontane woodland and valley and foothill grasslands. These plants were not seen during the surveys.

Impacts

The proposed project would not have an impact to either the Congdon's tarplant or round-leaved filaree. Neither the Congdon's tarplant nor the round-leaved filaree was found in the proposed project area.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are necessary.

2.3.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration Fisheries, 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. 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 National Oceanic and Atmospheric Administration Fisheries 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
- Marine Mammal Protection Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Sections 4150 and 4152 of the Fish and Game Code

Affected Environment

Caltrans biologists conducted field surveys in September 2004, February 2007, and March 2007 to identify animal species.

On March 23, 2007, two western pond turtles were identified in an agricultural ditch that drains into San Juan Creek. The western pond turtle (*Emys marmorata*) is a California Department of Fish and Game species of special concern.

No other special-status animal species were identified within the project limits.

There are trees within the project limits, such as willows and the two rows of redwoods (*Sequoia sempervirens*) along State Route 156 next to the Mission Farm RV Park, which may be used by migratory birds.

Impacts

Habitat disturbance during construction of the bridge would place any western pond turtles in the area at risk. If western pond turtles enter the work area during construction, they could be injured or killed. No permanent net loss of aquatic habitat would occur with any of the Build Alternatives because all impacts to the western pond turtle and its habitat would be temporary impacts during construction. There may be a small amount (up to 0.01 acre) of permanent impact to riparian habitat dependent on the design method chosen for the bridge widening.

Avoidance, Minimization, and/or Mitigation Measures

Environmental Sensitive Area fencing will be used to exclude western pond turtles from the work area during construction.

The proposed project may require the relocation of any western pond turtles found in the work area during construction of the bridge at San Juan Creek (see Figure 2-4). A qualified biologist will monitor the project area during construction activities that occur in this portion of the project. If any turtles are found, they will be returned to a safe part of San Juan Creek or the drainage ditch, well away from construction activities. All riparian areas affected by the project would be replanted with willows to the maximum extent practical. At minimum, enough area would be planted to ensure that there would be no net loss of aquatic or riparian habitat as a result of this project.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: 16 U.S. 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 upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, and Caltrans as assigned, are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries 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 Biological Study Area for the project is shown in Figure 2-3. Caltrans biologists identified habitat for the California red-legged frog and the California tiger salamander within the project area.

California Red-Legged Frog

The U.S. Fish and Wildlife Service listed the California red-legged frog as threatened. The U.S. Fish and Wildlife Service designated critical habitat for the California red-legged frog on March 13, 2001. On November 6, 2002, the U.S. Fish and Wildlife Service withdrew the critical habitat designation due to litigation. On April 13, 2004, the U.S. Fish and Wildlife Service re-proposed critical habitat for the California red-legged frog. The Biological Study Area does not currently fall within designated California red-legged frog critical habitat (April 13, 2006).

On October 11, 2000, Caltrans biologists conducted a survey for the California red-legged frog but did not find any. On October 17, 2003, Caltrans biologists found four adult California red-legged frogs in the large drainage ditch, approximately 50 feet from San Juan Creek (Figure 2-4). The primary source of water for this ditch is agricultural runoff and can be expected year round.

California red-legged frogs can range in size from 1.5 to 5 inches in length. The belly and hind legs of adult frogs are often red or salmon pink, henceforth its name. The frog's back has small black flecks and larger dark blotches on a background of brown, gray, olive, or reddish-brown. Between late winter and early spring, during

the few weeks of breeding season, the frogs can be recognized by their low, staccato grunts, except for the northern red-legged frog, which has no vocal sacs.

According to the U.S. Fish and Wildlife Service, the breeding season for California red-legged frogs can range from November through March with earlier breeding records occurring in southern localities. Red-legged frogs found in Northern California breed soon after the ice melts, from January to March. Red-legged frogs found in interior sites may hibernate, whereas, frogs living in coastal drainages are rarely inactive.

Females can lay between 2,000 and 5,000 eggs in a single mass, usually during or shortly following large rainfall events from late December to early April. The eggs are attached to vertical emergent vegetation, such as bulrushes or cattails. The eggs take 6 to 14 days to hatch, and tadpoles take anywhere from 3.5 months to 7 months to develop into frogs. Less than 1 percent of the hatched eggs become adult frogs. Tadpoles and young frogs feed on invertebrates, which they hunt day and night. Adult frogs feed and are mostly active at night when they can feed on insects, California mice, and Pacific tree frogs.

Their habitat is fairly distinctive, combining both specific aquatic and riparian components. Adults require dense, shrubby or emergent riparian vegetation closely associated with still or slow-moving deep water (at least 2 1/3 feet deep).

California Tiger Salamander

On August 5, 2004, the U.S. Fish and Wildlife Service listed the California tiger salamander (*Ambystoma californiense*) as threatened throughout its range.

Caltrans biologists conducted surveys around the ponds nearest to the project area for California tiger salamanders on December 11, 2003, and no salamanders were sighted. Surveys conducted at known California tiger salamander ponds the same night also produced negative results. This was a dry winter. A survey was attempted in January 2007, but ponds near the non-native grassland did not hold water sufficiently long enough to support California tiger salamander breeding.

The California tiger salamander (*Ambystoma californiense*) is an amphibian. It is large or stocky with a broad, rounded snout. Adult males are about 8 inches long, whereas, the females grow a little less than 7 inches long. They have white or pale yellow spots or bars on a black background on the back and sides. Their bellies vary from almost uniform white or pale yellow to a variegated pattern of white or pale

yellow and black. They have small eyes with black irises. The eyes protrude from their heads.

The species is restricted to grasslands and low (under 1,500 foot) foothill regions where lowland aquatic sites are available for breeding. They prefer natural seasonal pools or ponds that mimic them (stock ponds that are allowed to go dry).

California tiger salamanders are known to occur in several ponds on the San Juan Oaks Golf Course property, which is located west of Union Road and approximately 900 feet south of State Route 156. No California tiger salamander aquatic habitat occurred within the project footprint.

There is not continuous grassland habitat connecting the project footprint to the nearest California tiger salamander breeding ponds. The California tiger salamander spends about 95 percent of its lifecycle (its non-breeding period) in burrows. A small area of non-native grassland is located at the east end of the project at the southeast corner of the State Route 156 and Union Road intersection (see Figure 2-5). A low density of pocket gopher and California ground squirrel burrows, which may be used by California tiger salamanders, are located in an area of this non-native grassland. This area is periodically mowed adjacent to Union Road and is surrounded by agricultural fields on the west and north side of the project footprint.

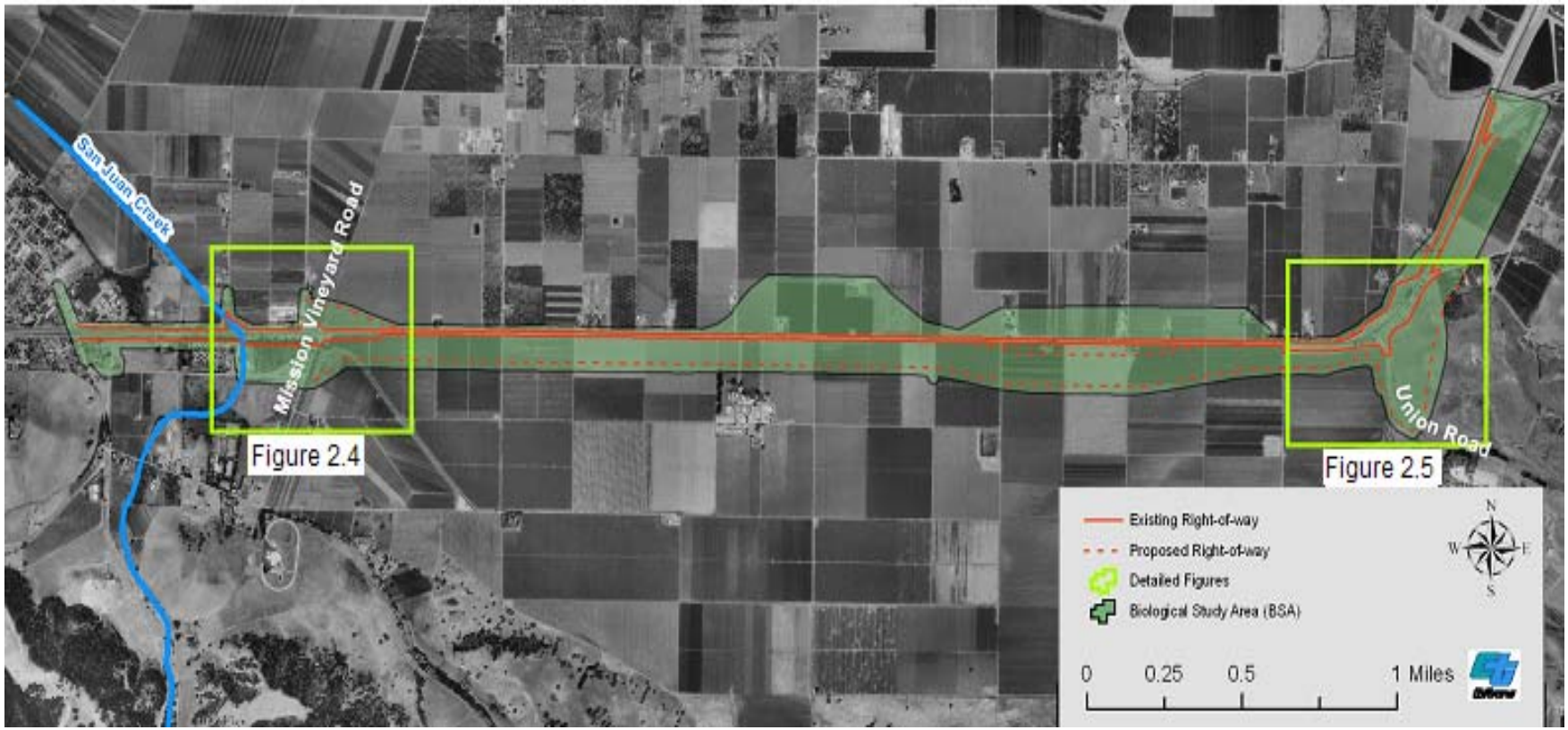
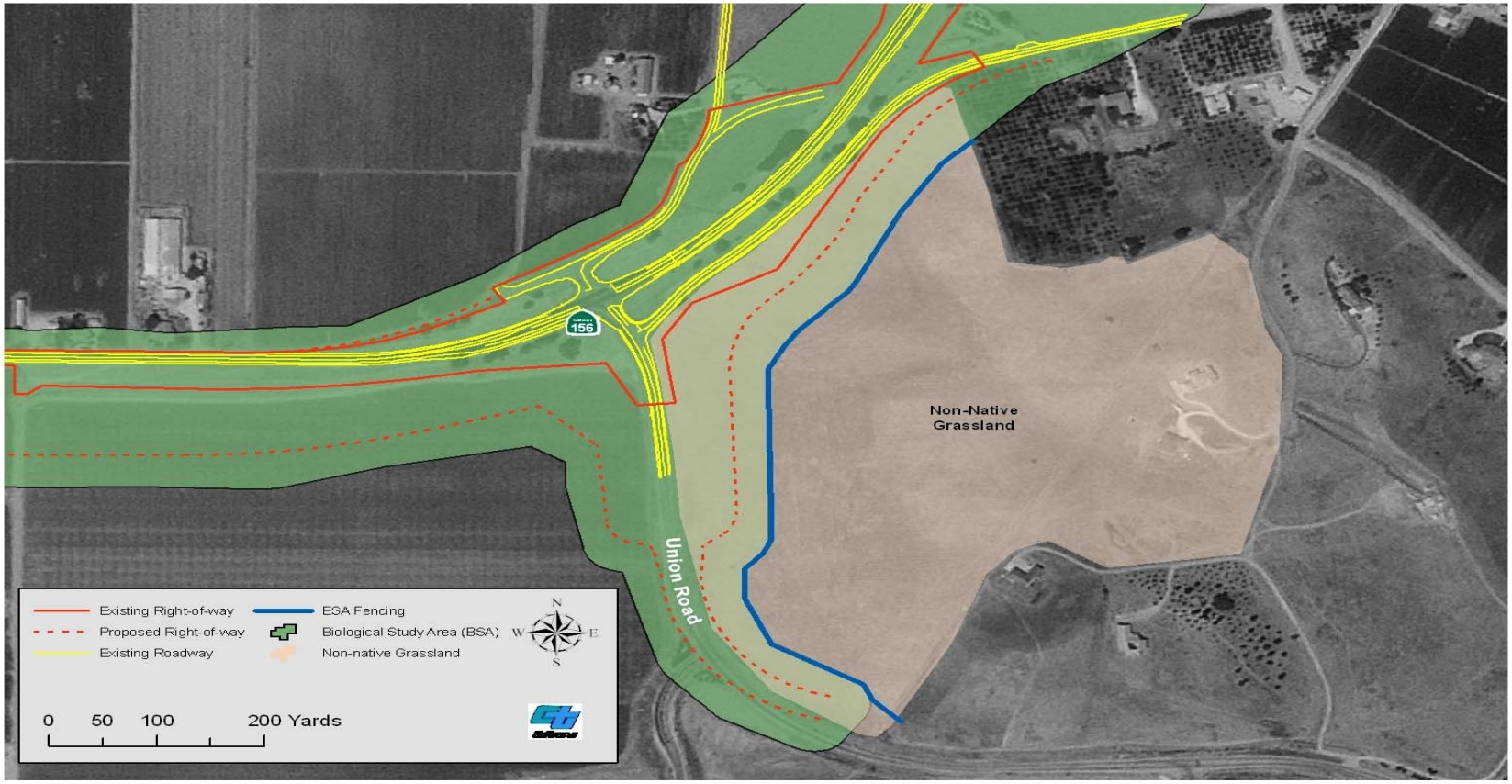


Figure 2-3 Biological Study Area (BSA) for the Project

This section shows the area of temporary and permanent impacts to the California red-legged frog (CRLF).

Figure 2-4 Biological Study Area (San Juan Creek area)



This section shows the placement of ESA fencing used to indicate the Environmentally Sensitive Area (ESA).

Figure 2-5 Biological Study Area (Union Road)

Impacts

California Red-Legged Frog

Formal Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) will be initiated with a possible determination of "effect, not likely to adversely affect."

Biological surveys examined the possibility that widening the highway could increase road-induced mortality and "barrier effect" for California red-legged frogs ("barrier effect" refers to a reduction of habitat access). Studies cited by the U.S. Fish and Wildlife Service in the Final Rule designating California red-legged frog critical habitat (which was withdrawn) found that traffic volumes of 26 cars per hour reduced the survival rate of common toads (*Bufo bufo*) crossing roads to zero. The U.S. Fish and Wildlife Service further concluded that roads that averaged 30 cars or more per hour between the hours of 10:00 p.m. and 4:00 a.m. were barriers to California red-legged frog dispersal (USFWS, 2001). Research conducted by Caltrans for State Route 156 between U.S. 101 and Hollister indicates that traffic volumes substantially exceed the 30 cars per hour threshold during that time period.

Caltrans biologists have determined there would be no appreciable increase in road-induced mortality or "barrier effect" as a result of the project because the existing highway is already a barrier to California red-legged frogs.

Habitat disturbance during construction of the bridge would place frogs in the area at risk. If California red-legged frogs enter the work area during construction, they could be injured or killed. Although the project may result in the death of a small number of California red-legged frogs, its impacts to this population of California red-legged frogs and their habitat would be minor. No permanent net loss of California red-legged frog aquatic habitat would occur with any of the Build Alternatives because all impacts to the California red-legged frog and its habitat would be temporary impacts during construction. There may be a small amount (up to 0.01 acre) of permanent impact to riparian habitat dependent on the design method chosen for the bridge widening.

California Tiger Salamander

Due to the low density of rodent burrows and the lack of continuous grassland habitat connecting the Biological Study Area to the nearest California tiger salamander breeding ponds located over two miles away, there is a low likelihood of this non-native grassland being used as California tiger salamander upland habitat. With the current design and the avoidance and minimization efforts that have been

incorporated into the project, Caltrans anticipates that there would be no temporary or permanent impact to upland habitat occupied by California tiger salamanders.

Since there are no expected impacts to California tiger salamander, formal consultation is not required with U.S. Fish and Wildlife Services. However, Caltrans may engage in informal consultations to insure impacts are avoided.

Avoidance, Minimization, and/or Mitigation Measures

A Biological Assessment will be prepared and Section 7 consultation with the U.S. Fish and Wildlife Service will be initiated through Caltrans, as assigned by the Federal Highway Administration, once the preferred alternative has been selected. This project may qualify for the Programmatic Biological Opinion for California red-legged frog issued to the Federal Highway Administration.

California Red-Legged Frog

The proposed project may require the relocation of any California red-legged frogs found in the work area during construction of the bridge at San Juan Creek (see Figure 2-4).

All riparian areas affected by the project will be replanted with vegetation similar to what was removed (such as willows) to the maximum extent practical. At minimum, enough area would be planted to ensure that there would be no net loss of California red-legged frog aquatic or riparian habitat as a result of this project. San Juan Creek and the ditch adjacent to the creek would be designated as an environmentally sensitive area and fenced to avoid impacts to California red-legged frog habitat (see Figure 2-4). For all Build Alternatives, the following measures would be taken to avoid or minimize impacts to the California red-legged frog:

- A qualified biologist would survey the portions of the east ditch and San Juan Creek within the footprint of the project. If any California red-legged frogs were found, then the biologist would relocate them to suitable habitat within San Juan Creek.
- Caltrans would identify all areas of suitable California red-legged frog habitat near the project but outside the footprint of the project as Environmentally Sensitive Areas. Caltrans would direct the contractor to avoid these areas (see Figure 2-3).
- During project activities, all trash that may attract predators would be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris would be removed from work areas.

- All refueling, maintenance, and staging of equipment and vehicles would occur at least 60 feet from riparian habitat or water bodies and preferably not in a location where a spill could drain directly toward aquatic habitat. Prior to the onset of work, the construction contractor would ensure that a plan is in place for prompt and effective response to any accidental spills. All workers would be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
- Project sites would be re-vegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. This measure would be implemented in all areas disturbed by activities associated with the project unless it is not feasible or practical; i.e., an area disturbed by construction that would be used for future activities would not need to be re-vegetated.
- Habitat contours would be returned to their original configuration at the end of project activities. This measure would be implemented in all areas disturbed by activities associated with the project, unless it is not feasible or modification of original contours would benefit the California red-legged frog.
- Caltrans would attempt to schedule work activities for times of the year when impacts to the California red-legged frogs would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and informal consultation between Caltrans and the U.S. Fish and Wildlife Service during project planning should be used to assist in scheduling work activities to avoid sensitive habitats during key times of the year.
- To control sedimentation during and after project implementation, the construction contractor would implement best management practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act that it receives for the specific project.
- If a work site were to be temporarily dewatered by pumping, intakes would be completely screened with wire mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. Water would be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any diversions or

barriers to flow would be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed would be minimized to the maximum extend possible; any imported material would be removed from the streambed upon completion of the project.

- Unless approved by the U.S. Fish and Wildlife Service, water would not be impounded in a manner that may attract California red-legged frogs.
- A biologist would permanently remove any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), crayfish, and centrarchid fishes from the project area, to the maximum extent possible. The biologist would be responsible for ensuring the activities are in compliance with the California Fish and Game Code.

California Tiger Salamander

The upland habitat within the non-native grasslands at the Union Road/State Route 156 intersection would be designated as an environmentally sensitive area and fenced to avoid potential impacts to California tiger salamanders adjacent to the footprint of the alternatives (see Figure 2-5).

Cumulative Impacts

California Red-Legged Frog

All impacts to the California red-legged frog and its habitat would be temporary or fully mitigated; therefore, the project would not contribute to any cumulative impacts.

California Tiger Salamander

There will be no permanent impacts to the California tiger salamander breeding or upland habitat; therefore, no mitigation is required, and the project would not contribute to any cumulative impacts.

2.3.6 Invasive Species

Regulatory Setting

On February 3, 1999, President 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

Highway corridors provide opportunities for the movement of invasive species, which can travel on vehicles and in the loads they carry. Invasive plants can be moved from site to site during spraying and mowing operations. Weed seed can be inadvertently introduced into the corridor on equipment during construction and through the use of mulch, imported soil or gravel, and sod. Although the highway right-of-way provides ample opportunity for weeds in adjacent land to spread along the highway corridor, the proposed project is located in a cultivated area where invasive species outside the highway right-of-way are controlled by agricultural processes.

Impacts

The proposed project is not likely to introduce or promote the spread of any invasive species outside the highway corridor.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans standard practice includes the prevention of the introduction and the proliferation of invasive plant species in the highway corridor. These standard practices may include the following:

- Bared soil will be landscaped with Caltrans' recommended seed mix from locally adapted species to preclude the invasion of noxious weeds. The use of site-specific materials, which are adapted to local conditions, increases the likelihood that revegetation of bare soil will be successful and maintains the genetic integrity of the local ecosystem.
- Trucks with loads carrying vegetation would be covered, and vegetative materials removed from the site would be disposed of in accordance with applicable laws and regulations.
- In areas of particular sensitivity, extra precautions will be taken if invasive species are 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.

Chapter 3 California Environmental Quality Act Evaluation

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act and the National Environmental Policy Act. The Federal Highway Administration's responsibility for environmental review, consultation, and any other action required in accordance with the National Environmental Policy Act and other applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327. Caltrans is the lead agency under the California Environmental Quality Act and the National Environmental Policy Act.

One of the primary differences between the National Environmental Policy Act and the California Environmental Quality Act is the way significance is determined.

Under the National Environmental Policy Act, significance is used to determine whether an Environmental Impact Statement, or some lower level of documentation, will be required. The National Environmental Policy Act requires that an Environmental Impact Statement be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under the California Environmental Quality Act may not be of sufficient magnitude to be determined significant under the National Environmental Policy Act. Under the National Environmental Policy Act, once a decision is made regarding the need for an Environmental Impact Statement, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. The National Environmental Policy Act does not require that a determination of significant impacts be stated in the environmental documents.

The California Environmental Quality Act, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared.

Each significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the California Environmental Quality Act Guidelines list a number of mandatory findings of significance, which also require the preparation of an Environmental Impact Report. There are no types of actions under the National Environmental Policy Act that parallel the findings of mandatory significance under the California Environmental Quality Act. This chapter discusses the effects of this project and California Environmental Quality Act significance.

3.1 Determining Significance under the California Environmental Quality Act

"Significant effect" on the environment means substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. A definitive statewide meaning for the term "significant effect" is not possible since the environmental effects caused by a project vary with the setting.

3.2 Discussion of Significant Impacts

See Chapter 2 for a discussion of affected environments, potential impacts, and avoidance, minimization and/or mitigation measures. Chapter 3 discusses the impacts addressed in Chapter 2 that fall under the jurisdiction of the California Environmental Quality Act.

3.2.1 Less than Significant Effects of the Proposed Project

Noise

When determining whether a noise impact is significant under the California Environmental Quality Act, comparison is made between the no-build noise level and the build noise level. The California Environmental Quality Act noise analysis is completely independent of the National Environmental Policy Act-23 Code of Federal Regulations 772 analysis discussed in Chapter 2, which is centered on noise abatement criteria. Under the California Environmental Quality Act, the assessment

entails looking at the setting of the noise impact and then how large or perceptible any noise increase would be in the given area. Key considerations include the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level.

Caltrans identified 27 noise receptors, which represent homes and businesses in the project area. Tables 2.13 through 2.15 in Chapter 2 show the existing and predicted noise levels at these receptors with and without the project. All of the Build Alternatives would have similar effects on the receptors.

Receptors 1, 2, and 3 would increase by 3 dBA with the project. There would be no change in the noise levels with the project at receptors 4, 5, and 6. Receptors 8 through 10a and 15 through 24a would have a decrease in noise with the project. At Receptors 11 and 12, there would no change with Alternative 2 and a 1-dBA increase with Alternatives 4A and 6. Receptor 13 would have no change in noise levels with Alternative 2 or 4A and a 1-dBA increase with Alternative 6. Because an increase in noise levels of 1 to 3 dBA would be barely perceptible to the human ear, no significant noise impact would occur under the California Environmental Quality Act and no mitigation is required at these receptors.

Receptor 14 would have a 5-dBA increase and Receptor 25 would have a 4-dBA increase with the project under all Build Alternatives. Because a substantial noise impact is defined as an increase of 12 dBA from the existing conditions under the California Environmental Quality Act, the changes at Receptors 14 and 25 would not be considered significant and no mitigation is required. However, under the National Environmental Policy Act, because the noise level at receptor 25 is already at the noise abatement criteria of 67 dBA, noise abatement was considered and found to be reasonable and feasible.

3.2.2 Significant Environmental Effects of the Proposed Project

Caltrans has determined, according to California Environmental Quality Act guidelines, the project has the potential to have significant effects to farmland. The Natural Resource Conservation Service Farmland Impact Rating indicates that each Build Alternative would result in significant effects on adjacent farmland.

3.2.3 Unavoidable Significant Environmental Effects

Farmland conversion was a consideration in determining which alternatives would warrant further consideration and which alternatives would be withdrawn. However, significant environmental effects to farmland are unavoidable because the existing State Route 156 is surrounded by farmland and any modification or new alignment of the route inevitably affects farmland. Alternatives to the north would lessen the farmland conversion but would result in numerous residential and utility relocations. The alternatives considered and withdrawn were discussed in Section 1.3.4.

3.2.4 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 reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493, California launched an innovative and proactive approach to dealing with greenhouse gas emissions and climate change at the state level. Assembly Bill 1493 requires the Air Resources Board to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions; these regulations will apply to automobiles and light trucks beginning with the 2009-model year. Greenhouse gases 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).

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.

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.

Affected Environment

According to *Recommendations by the Association of Environmental Professionals on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

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).

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 to 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.

Impacts

The purpose of the proposed project is to improve route continuity, reduce congestion, and increase safety on State Route 156 within the project limits. Level of Service on this section of State Route 156 during peak hour is already E and would be expected to reach gridlock conditions (Level of Service F) by 2011 with the No Project Alternative. Level of service is improved to Level of Service B by 2011 (the construction year) with all the Build Alternatives. By the year 2030, Alternative 2 would still operate at Level of Service B, while Alternative 4a and 6 would drop to Level of Service C only during the morning peak hour

Although growth has slowed somewhat since 2000, San Benito County, especially in the project area, has been experiencing explosive population growth. According to the U.S. Census Bureau, between 1990 and 2000, San Benito County's population increased by 45.1 percent, with most of the growth in or near the two incorporated cities of Hollister and San Juan Bautista. During the same period, California's increase in population was only 13.6 percent.

This segment of State Route 156 is the only link between Hollister and San Juan Bautista. Local commuter, commercial trucks and agricultural equipment associated with the farms in the San Juan Valley, and tourists traveling between the San Joaquin Valley and coastal destinations all use this segment of the highway.

Economic growth in the neighboring county of Santa Clara has created pressure for residential growth in San Benito County where housing is more affordable. According to the U.S. Census Bureau, almost half of the residents in San Benito County, including its two incorporated cities, commute outside San Benito County for employment. The number of registered vehicles and registered drivers has also grown accordingly.

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in greenhouse gas emission levels, including carbon dioxide, at the project level is not currently possible. No federal, state, or regional regulatory agency has provided methodology or criteria for greenhouse gas emissions and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific- or regulatory-based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

Avoidance, Minimization, and/or Mitigation Measures

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 Davis.

3.3 Mitigation Measures for Significant Impacts under the California Environmental Quality Act

Caltrans policy is to avoid or minimize farmland impact to the maximum extent possible but Caltrans does not “replace” farmland. All potential land acquisition for this project would be subject to the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations Part 24.

This project conforms to the General Plans of San Benito County and San Juan Bautista, which envision this highway improvement. Most of the farmland in the project area is Prime and Unique farmland. The No-Build Alternative is the only alternative that would avoid farmland impacts, but it would not meet the Purpose and Need of the project. Alternative 4A would incur the least farmland impact of the Build Alternatives. The maximum acreage of farmland converted by the Build Alternatives is 198 acres (Alternatives 2 and 6), which represents less than .003 percent of the farmland identified in San Benito County by the Natural Resources Conservation Service.

Farm easements would not be effective for the proposed project because the majority of the farmland affected by the proposed project is under Williamson Act contracts. Currently, the use of agricultural or farm easements in California is very small in comparison to the use of the Williamson Act. Lands under the Williamson Act contracts make up 16 million acres of California's 27 million farmland acres.

Farm easements allow owners of farmland to voluntarily sell or trade development rights on their farms to government or nonprofit organizations in exchange for agreeing to keep land permanently available for agriculture. Owners with land contracted under the Williamson Act receive limited tax incentives to maintain land in agriculture for 10 years or more. The proposed project would not result in the full acquisition or severance of any farm operation nor would it result in the cancellation of Williamson contracts. In addition, San Benito County has a strong commitment to

agriculture already as demonstrated by their policies and planning. The current San Benito County zoning maps indicate that all of the project area will continue to be preserved for agriculture.

Chapter 4 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, interagency coordination meetings, and public contact. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Project Development Team Meetings

The Project Development Team is a multi-disciplinary team that consists of Caltrans employees from various functional units, such as project management, design, environmental, and right-of-way, as well as other interested parties and representatives from the San Benito Council of Governments, Hollister, and San Juan Bautista.

Between 1999 and 2006, numerous meetings with the Project Development Team, various Caltrans functional units, and focused team meetings were held to discuss the development of the project. Meetings were held in 2005 and 2006 with the San Juan Bautista City Council and the San Benito Council of Governments to update the agencies on the progress of the project, gather input, and to address any concerns.

4.2 Notice of Preparation

A Notice of Preparation is required for Environmental Impact Reports and was sent to the State Clearinghouse on September 4, 2002. The following agencies and interested parties were also notified:

- City of San Juan Bautista Public Works Department
- City of Hollister Public Works Department
- City of Hollister Planning Department
- San Benito County Public Works Department
- San Benito County Water District

- San Benito County Council of Governments
- San Benito County Planning Department
- Monterey Bay Air Pollution Control District
- Association of Monterey Bay Area Governments
- Regional Water Quality Control Board
- California Department of Conservation
- California Department of Fish and Game
- California Highway Patrol
- State Water Resources Control Board
- State Historic Preservation Office
- Natural Resource Conservation Service
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers

4.3 Consultation with Responsible/Cooperating Agencies and Interested Parties

Since there are no expected impacts to California tiger salamander, formal consultation with U.S. Fish and Wildlife Services is not required. However, Caltrans may engage in informal consultations to insure impacts to the species are avoided.

Formal Section 7 consultation with the U.S. Fish and Wildlife Service will be initiated for the California red-legged frog once a preferred alternative is selected with a possible determination of "Effect, not likely to adversely affect."

The State Historic Preservation Office was consulted in April 2007 regarding potential impacts to a historic property, the Ferry Morse Seed Company complex.

Representatives from the following Native American interests received general project information, archaeological survey reports, and invitations to monitor field excavations. The information and invitations were also sent to individual Native Americans.

- Amah San Juan Bautista Ohlone/Costanoan Indians (April 2000)
- San Juan Bautista Band Amah San Juan Bautista Ohlone/Costanoan Indians (July 2000).

Contact with the following agencies or interests occurred at various times during the environmental process:

- City of San Juan Bautista
- City of Hollister
- County of San Benito
- Council of San Benito County Governments
- Mission Farm RV Park

4.4 Public Information Meetings

The following discussions of public meetings were compiled from meeting minutes and press articles.

March 2001

A Public Information Meeting/Open House was held on March 7, 2001 at the San Juan Oaks Golf Club in Hollister. The purpose of the meeting was to provide the public and interested parties with information regarding the status of the project and to gain public input on the project alternatives. Caltrans staff specialists in engineering, environmental analysis, right-of-way, and landscape architecture were on hand to provide specific information about the proposed project.

Letters of invitation to the meeting were sent to federal, state, and local officials. Newsletter invitations were sent to property owners and businesses within the study area. The meeting was also announced to the general public by advertisements in the local paper, *The Pinnacle*, on February 15, 2001 and February 22, 2001.

Attendees received an information sheet with a project map showing the location and detailing project purpose, background, description, cost, funding source, project timeline, and contact information. Attendees were provided comment cards and were encouraged to visit information stations to view maps, displays, and graphics. Caltrans Project Development Team staff members were available at each station to explain maps and displays, answer questions, and receive public input.

Upon arrival, attendees were asked to sign in and list their address. Of the 81 attendees, 30 lived in Hollister and 37 lived in San Juan Bautista. The remaining 14 lived in other San Benito County communities or Santa Cruz and Santa Clara counties.

Written comments were received from 32 attendees and 38 oral comments were recorded. Caltrans staff responded to written comments later by contacting the person who had submitted the comment. Caltrans staff responded to oral comments either onsite at the meeting or in a follow-up response.

The comments varied but many comments expressed concern or support of the following:

- Safety: Residents concerned over safely crossing or accessing the existing highway supported the safety improvement aspect.
- Visual, Landscaping, and Quality of Life: Residents were afraid of losing the small town feel of San Juan Bautista.
- Noise: Residents close to the highway expressed concern over noise increases.
- Flooding: Residents wanted to include drainage improvements or were concerned about additional flooding.
- Business: Business owners in San Juan Bautista expressed concern over changes in traffic patterns.
- Farmland: Residents expressed concern over the conversion of farmland.
- State Route 25: Residents indicated support for an alternate project on State Route 25 to serve through traffic.
- Increase Demand: Residents indicated concern that the project would increase traffic.

November 2005

A Town Hall Meeting was held November 30, 2005 in San Juan Bautista to give an update on the proposed San Benito Route 156 Improvement Project. Before breaking into groups to better understand and document community concerns, Caltrans personnel gave an overview of the project, as well as regional and interregional transportation concerns. The meeting, attended by about 35 primarily local residents, reinforced previously expressed opposition to the proposed project. The following summarizes comments opposing the proposed project:

- Caltrans continues to study the project despite local endorsement of the Farm Bureau's 3-in-1 Alternative.
- The Southern Gateway Transportation and Land Use Study Alternative 4 should also be considered. Alternative 4, one of six east/west 4-lane proposals is similar to the 3-in-1 Alternative in that it would be on new alignment and would replace proposed projects on State Routes 156, 152, and 25.

- Elevated portions of the proposed project would increase flooding. (Culverts and drainage improvements would maintain current hydrological patterns).
- The project would increase traffic noise, specifically from the use of “jake brakes” on trucks.
- Local use of the highway is fairly limited due to congestion and safe access problems so the project would be most beneficial to regional and interregional traffic, notably truck traffic.
- Highway demand is a state problem with the proposed project disproportionately impacting the local community.
- The San Juan Bautista Mission’s atmosphere and the community’s quality of life would be jeopardized with the completion of the proposed project.
- High truck traffic volume is the result of Caltrans traffic management so the solution should not rest on San Juan Bautista.
- The proposed project would take too much farmland.

The comment most often expressed was that a new alignment, which would replace proposed projects on State Routes 156, 152, and 25, should be considered. The meeting closed with an agreement to schedule future meetings that involve a larger group of interested parties.

4.5 Recent Action

Although the City of San Juan Bautista General Plan acknowledges the need to widen State Route 156, the San Juan Bautista City Council has opposed the project in the past. The City Council stated widening this segment of the highway would affect their small town atmosphere, would decrease farmland, and would increase truck traffic, air pollution, and noise.

On October 24, 2006, the San Benito County Board of Supervisors unanimously adopted and passed a resolution that identifies the top three transportation priorities for the region: construction of four lanes on State Routes 152, 156, and 25.

Subsequently, the San Benito Council of Governments also passed a similar resolution identifying the construction of four lanes on State Routes 152, 156, and 25 as the County's highest priorities.

Chapter 5 List of Preparers

The following California Department of Transportation Central Region Staff prepared this Environmental Impact Report/Environmental Assessment:

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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 Environmental Impact Report/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or mitigation measures, except for noise, is under the appropriate topic headings in Chapter 2. Noise impacts under the California Environmental Quality Act are discussed in Chapter 3.

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 building 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 that would adversely affect day or nighttime views in the area?				X
AGRICULTURE 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. 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) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
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 Impact 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 that exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentration?				X
e) Create objectionable odors affecting a substantial number of people?				X
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, and regulations or by the California Department of Fish and Game or U.S. 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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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
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?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
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:				X
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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				X

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	X
HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	X
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 material, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X
d) Be located on a site that 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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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
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 that 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 that would result in substantial erosion or siltation on or offsite?	☐	☐	☐	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 that would result in flooding on or offsite?	☐	☐	☐	X
e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	X
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 that 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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
j) Result in inundation by a seiche, tsunami, or mudflow?				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
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
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		

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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
f) 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
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
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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 that might have an adverse physical effect on the environment?	☐	☐	☐	X
TRANSPORTATION/TRAFFIC - Would the project:				
a) 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)?	☐	☐	☐	X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patters, 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) Result in inadequate parking capacity?	☐	☐	☐	X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	X
UTILITY 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

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				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 determination by the wastewater treatment provider that 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
MANDATORY FINDINGS OF SIGNIFICANCE -				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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 that will cause substantial adverse effects on human beings, either directly or indirectly?				X

Appendix B 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 seven historic properties within or adjacent to the project area through a combination of field investigations, archival research, and analysis, which are discussed in detail in Section 2.1.8, Cultural Resources. The State Historic Preservation Office concurred with the eligibility determinations documented in the 2002 Historical Property Survey Report (See Appendix E). Caltrans has determined, as a whole, the proposed project would have no adverse effect on the Ferry Morse Seed Company, and no effect on the other six historic properties: the Benjamin Wilcox House; the Frank M. Avilla, Sr., House; the John Breen Adobe; the San Justo School; the Tebetts Orchard/Nutting Property; and the Mitchell Fruit Farm.

In April 2007, Caltrans consulted with the State Historic Preservation Office regarding a potential de minimis impact to one of the historic properties, the Ferry Morse Seed Company. The State Historic Preservation Office recommended a revision of the boundaries delineated for the historic property from the 112-acre legal property parcel to the more appropriate perimeter of a smaller 18-acre portion of the legal parcel, which is the portion occupied by the two dozen buildings making up the seed-processing complex. The State Historic Preservation Office concurred with the new boundary determinations documented in the Caltrans correspondence dated April 27, 2007 (See Appendix E).

Caltrans has determined that the proposed project avoids all 4(f) properties identified within or adjacent to the proposed project, does not permanently use or hinder the preservation of any 4(f) property, and does not have any proximity impacts that would result in constructive use.

Appendix C Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

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 your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

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

WILL KEMPTON
Director

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Appendix D Summary of Relocation Benefits

California Dept. of Transportation Relocation Assistance Program

Relocation Assistance Advisory Services

The California Department of Transportation (Caltrans) would provide relocation advisory assistance to any person, business, farm, or non-profit organization displaced as a result of Caltrans' acquisition of real property for public use. Caltrans would assist residential displacees in obtaining comparable decent, safe, and sanitary replacement housing by providing current and continuing information on sales prices and rental rates of available housing. Non-residential displacees would receive information on comparable properties for lease or purchase.

Residential replacement dwellings would be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees would be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, or national origin, and that are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance would also include supplying information concerning federal- and state-assisted housing programs, and any other known services being offered by public and private agencies in the area.

Residential Relocation Payments Program

For more information or a brochure on the residential relocation program, please contact Julie Dick Tex by e-mail at julie_dick_tex@dot.ca.gov, by telephone at (559) 243-8299, or by mail at 2015 E Shields Ave., Suite 100, Fresno, CA 93726.

The brochure on the residential relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/residential_english.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/residential_spanish.pdf.

If you own or rent a mobile home that may be moved or acquired by Caltrans, a relocation brochure is available in English at http://www.dot.ca.gov/hq/row/pubs/mobile_eng.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/mobile_sp.pdf.

The Business and Farm Relocation Assistance Program

For more information or a brochure on the relocation of a business or farm, please contact Julie Dick Tex by e-mail at julie_dick_tex@dot.ca.gov, by telephone at (559) 243-8299, or by mail at 2015 E Shields Ave., Suite 100, Fresno, CA 93726.

The brochure on the business relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/business_farm.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/business_sp.pdf.

Additional Information

No relocation payment received would be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project would not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments would not be required to move unless at least one comparable “decent, safe, and sanitary” replacement residence, open to all persons regardless of race, color, religion, sex, or national origin is available or has been made available to them by the state.

Any person, business, farm, or non-profit organization, which has been refused a relocation payment by Caltrans, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or the Caltrans’ Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may choose to obtain legal council at his/her expense. Information about the appeal procedure is available from Caltrans’ Relocation Advisors.

The information above is not intended to be a complete statement of all of Caltrans’ laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of Caltrans’ relocation programs.

Important Notice

To avoid loss of possible benefits, no individual, family, business, farm, or non-profit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California
Department of Transportation, District #05
50 Higuera Street
San Luis Obispo, CA 93701

Appendix E State Office of Historic Preservation Concurrence Letters

Concurrence determination for Ferry Morse Seed Company complex, page 1 of 3

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TDD (805) 549-3259
http://www.dot.ca.gov/dist05/

Flex your power!
Be energy efficient!

April 27, 2007

Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
PO Box 942896
Sacramento, CA 94296-0001

File: FHWA030122A
Ferry-Morse Seed Company

Dear Mr. Donaldson:

RE: PROPOSED REVISION OF HISTORIC PROPERTY BOUNDARY

Background

On behalf of the Federal Highway Administration, the Department of Transportation is requesting a revision of the property boundaries for a historic resource located on the outskirts of San Juan Bautista in northern San Benito County (Attachment A, Figure 1). The property, the former Ferry-Morse Seed Production Facility, located at 2191 San Juan-Hollister Road (State Route 156), was evaluated for eligibility to the National Register of Historic Places during architectural studies done in connection with the San Benito 156 Four-Lane Widening project.[1] The Ferry-Morse property was determined eligible, at the state level of significance, under Criteria A and C, and the State Historic Preservation Officer concurred in the property's eligibility on June 9, 2003 (FHWA030122A; see Attachment B).

The DPR 523 forms for the Ferry-Morse property (which accompanied the Historic Property Survey Report forwarded to the SHPO and which are appended to this letter as Attachment C) made the historic property boundaries coterminous with the boundaries of the property's current legal 112.2-acre parcel (San Benito County Assessor Parcel Number 018-180-006). Although this approach to the delineation of historic property boundaries is one that is frequently used, US Department of the Interior guidance clearly promotes delineating boundaries that are appropriate to the nature and significance of the resource in question. In this particular instance, it would have been more appropriate to delineate the boundary as the perimeter of a smaller 18-acre portion of the legal parcel – the portion occupied by the two dozen buildings making up the seed-processing complex.

[1] Stephen R. Wee, Historic Architectural Survey Report, Highway 156 Widening Project: Alameda Road to Mitchell-Union Road, San Benito County, CA, SBt 156 PM 1.6/5.2 (KP 2.5/7.8), prepared for the Department of Transportation, District 5, by JRP Historical Consulting Services, 1490 Drew Avenue, Suite 110, Davis, CA 95616, November 1999.

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Figure E-1 Ferry Morse Boundary Concurrence

Concurrence determination for Ferry Morse Seed Company complex, page 2 of 3

Milford Wayne Donaldson
State Historic Preservation Officer
April 26, 2007
Page 2

Eligibility Criteria

Under Criterion A the Ferry-Morse property (the headquarters of what was known as the San Juan Ranch) is significant for the important role it played in Ferry-Morse corporate history. The company acquired this property and adjacent acreage (totaling 900 acres) in 1910, when it decided to purchase a headquarters ranch that would not only increase the seed output of the company, but also function as a central base for the company's dispersed leased and contracted farming operations throughout central California (Figure 13) [2] As the headquarters of the production division, the seed complex received and processed vegetable and flower seed grown on the company's rapidly expanding acreage. By the 1920s the company owned or leased some 1,800 acres in the San Juan Valley alone. This vast acreage included tracts both north and south of State Route 156.

Under Criterion C the seed company complex is eligible for its architectural style as both the work of a regional master architect, William Binder, and a significant example of its resource type. Character-defining architectural features include the shingle-sided Craftsman style administrative and residential buildings, and also distinctive function-specific buildings that give the Ferry-Morse Seed Company complex its unique character and that illustrate its place in the continuum of the corporate history. The principal buildings include the two-story Headquarters Building, the Office Building, the Ranch House, and Dwellings 1 and 2, as well as the massive Seed Cleaning House and Chaff Yard/Mill.

Historic Property Boundaries

The significance of the historic property derives from the complex of buildings, both individually and aggregately. Although the DPR 523 forms refer to the fact that these resources exist in an expansive, rural agricultural setting, the fields are not specifically enumerated as character-defining features for the historic property. The reason for this is that it is the seed-processing aspects of the property, rather than the farming operations, that make the property a significant resource. The Ferry-Morse complex processed seeds that came from near and far, including from the company's own farms, farms owned by others, and leased farmland. The complex of buildings making up the seed-processing plant was evaluated from the perspective that the seed-processing operations and the farming operations were two distinct (albeit related) enterprises: one involved with processing and packaging, and the other involved with resource production and extraction.

In requesting a revision of the historic property boundaries, we wish to state that we have been in contact with the consultants who produced the DPR 523 forms and the Historic Architectural Survey Report (JRP Historical Consulting) in order to verify their original intent concerning the eligibility of the property and the delineation of the contributing and non-contributing features of the historic property. The legal parcel was, in fact, selected as a convenient, but arbitrary, amount

[2] The purchase of the original 900-acre parcel is recorded in San Benito County *Deeds* Book 44, pp 270-2.

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Concurrence determination for Ferry Morse Seed Company complex, page 3 of 3

JUL-03-2007 TUE 08:12 AM FAX NO. P. 04

Milford Wayne Donaldson
State Historic Preservation Officer
April 26, 2007
Page 3

of acreage. The 112.2 acres were not viewed as the amount of acreage needed to provide the optimal setting for the historic resource, and the agricultural fields located on the parcel were not called out as significant resources. If the legal parcel had happened to be 50 acres in extent, the historic property boundary would have been drawn at 50 acres. In other words, the 112.2-acre amount was dictated solely by the size of the modern parcel and not for any intrinsic significance.

We are therefore requesting that the State Historic Preservation Officer concur that the boundaries of the Ferry-Morse historic property should be revised to include only the 18-acre complex of buildings, as shown in Attachment A, Figure 2. If you have any questions, please contact Paula Juelke Carr, Associate Environmental Planner (Architectural History), at 805-549-3236.

Sincerely,

VALERIE A. LEVULETT
Chief, Central Region Technical Studies Branch
Department of Transportation
District 5
50 Higuera Street
San Luis Obispo, CA 93401
(805) 549-3669

I concur: Date: 03 July 2007

MILFORD WAYNE DONALDSON
State Historic Preservation Officer
Office of Historic Preservation

cc: Dominic Hoang, Federal Highway Administration

Attachments:
Attachment A: Figures
Figure 1: Project Vicinity and Location
Figure 2: Ferry-Morse Property Boundaries (Current and Proposed)
Attachment B: Previous Section 106 Correspondence
Attachment C: Original DPR 523 form for the Ferry-Morse property

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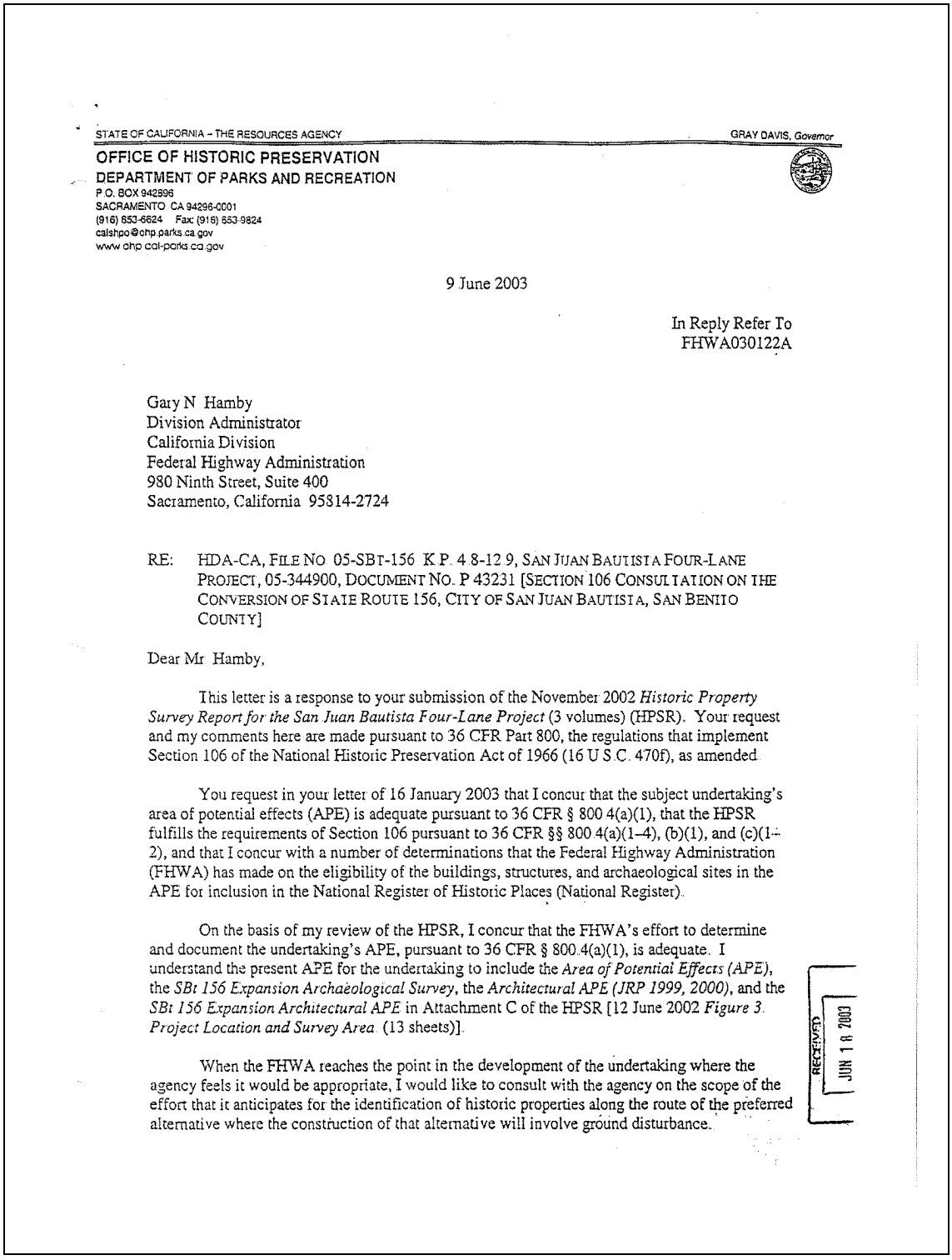
Concurrence determination for historic properties, page 1 of 3



STATE OF CALIFORNIA – THE RESOURCES AGENCY GRAY DAVIS, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.cal-parks.ca.gov

9 June 2003

In Reply Refer To
FHWA030122A

Gary N Hamby
Division Administrator
California Division
Federal Highway Administration
980 Ninth Street, Suite 400
Sacramento, California 95814-2724

RE: HDA-CA, FILE NO 05-SBT-156 K.P. 4.8-12.9, SAN JUAN BAUTISTA FOUR-LANE PROJECT, 05-344900, DOCUMENT NO. P 43231 [SECTION 106 CONSULTATION ON THE CONVERSION OF STATE ROUTE 156, CITY OF SAN JUAN BAUTISTA, SAN BENITO COUNTY]

Dear Mr. Hamby,

This letter is a response to your submission of the November 2002 *Historic Property Survey Report for the San Juan Bautista Four-Lane Project* (3 volumes) (HPSR). Your request and my comments here are made pursuant to 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended.

You request in your letter of 16 January 2003 that I concur that the subject undertaking's area of potential effects (APE) is adequate pursuant to 36 CFR § 800.4(a)(1), that the HPSR fulfills the requirements of Section 106 pursuant to 36 CFR §§ 800.4(a)(1–4), (b)(1), and (c)(1–2), and that I concur with a number of determinations that the Federal Highway Administration (FHWA) has made on the eligibility of the buildings, structures, and archaeological sites in the APE for inclusion in the National Register of Historic Places (National Register).

On the basis of my review of the HPSR, I concur that the FHWA's effort to determine and document the undertaking's APE, pursuant to 36 CFR § 800.4(a)(1), is adequate. I understand the present APE for the undertaking to include the *Area of Potential Effects (APE)*, the *SBt 156 Expansion Archaeological Survey*, the *Architectural APE (JRP 1999, 2000)*, and the *SBt 156 Expansion Architectural APE* in Attachment C of the HPSR [12 June 2002 *Figure 3. Project Location and Survey Area* (13 sheets)].

When the FHWA reaches the point in the development of the undertaking where the agency feels it would be appropriate, I would like to consult with the agency on the scope of the effort that it anticipates for the identification of historic properties along the route of the preferred alternative where the construction of that alternative will involve ground disturbance.

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Figure E-2 Historic Properties Concurrence

Concurrence determination for historic properties, page 2 of 3

I concur with the FHWA's determinations that the 16 *Memorandum of Understanding Properties* in Enclosure I to your letter of 16 January 2003 qualify for treatment under the 1 June 2001 *Caltrans* [California Department of Transportation] *Interim Policy for the Treatment of Buildings Constructed in 1957 or Later*.

I also concur with the FHWA's determinations that the 35 *Formally Evaluated Properties Which Are Ineligible for listing in the National Register of Historic Places* in Enclosure I are *not* eligible for inclusion in the National Register.

The FHWA determines that the Benjamin Wilcox House (315 The Alameda), the Tebbets Orchard/Nutting Property (4070 San Juan-Hollister Road), the Mitchell Fruit Farm (3680 San Juan-Hollister Road), the John Breen Adobe Historic District (120 Nyland Drive), and the John Breen Adobe (120 Nyland Drive) were previously listed and/or determined eligible for the National Register. The agency reevaluated the John Breen Adobe Historic District. With the exception of the John Breen Adobe, the buildings in the district are not significant, do not retain integrity to the period of significance, and have no direct association with John Breen. I concur with the FHWA's determination that the

John Breen Adobe Historic District

is *not* eligible for inclusion in the National Register.

I concur with the FHWA's further determinations that

CA-SBn-215H **P-35-000293** **P-35-000294**

are *not* eligible for inclusion in the National Register.

I understand, on the basis of a 22 May 2003 telephone conversation between Valerie Levulett, Caltrans District 5 Heritage Resource Coordinator, on behalf of the FHWA, that the FHWA revises its 16 January 2003 determination on the San Juan Pacific Railroad that the entire property is not eligible for inclusion in the National Register to be that the *portion* of the San Juan Pacific Railroad that Caltrans' records in the 20 November 2002 *Archaeological Survey Report for a Highway Widening from Two Lanes to Four along Highway 156, San Benito County, California* (Attachment E to the HPSR) would not contribute to the National Register eligibility of the entire railroad should that property (P-35-000295) ever be found to be so eligible. I concur with the FHWA's revised determination.

The FHWA determines that the

Ferry-Morse Seed Company (FMSC) production complex (2191 Route 156)

is eligible for inclusion in the National Register, because it is a highly intact example of a significant production facility of one of the most important Pacific Coast seed producers of the era. As an agricultural and industrial facility, it appears to be eligible for listing under Criterion A at the statewide level of significance. The FMSC also appears to meet Criterion C because of

Concurrence determination for historic properties, page 3 of 3

its association with well known local architect, William Binder. The property's period of significance is 1910-1949. I concur with the FHWA's determination for the property.

The FHWA determines further that the

San Justo School

is eligible for inclusion in the National Register under Criterion C, because it embodies the distinctive characteristics of well-designed Spanish Colonial Revival architecture and because of its association with well known local architect, Ralph Wyckoff. Its period of significance is from 1923-1968. The school is one of the best remaining examples of a rural schoolhouse from its era in San Benito County. I concur with the FHWA's determination for the property.

And the FHWA determines that the

Frank M. Avilla, Sr. house (411 The Alameda)

is eligible for inclusion in the National Register under Criterion C for its importance to architecture. This property, built around 1916, is eligible at the local level of significance as a significant example of a Bungalow style home, a style that is well-represented in San Juan Bautista. While there are many modest examples of working class bungalows, none rival this building in its execution of style. The building also has a remarkable degree of integrity with all of its character defining features present and in good condition. I concur with the FHWA's determination for the property.

Please direct any questions or concerns that you may have to Project Review Unit archaeologist Mike McGuirt at 916.653.8920 or at mmcguirt@ohp.parks.ca.gov.

Sincerely,

Dr. Knox Mellon
State Historic Preservation Officer

WKM:mdm

Appendix F National Resource Conservation Service Farmland Conversion Impact Rating

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 2/14/05
Name Of Project San Juan Bautista 4-Lane	Federal Agency Involved California Department of Transportation
Proposed Land Use Transportation	County And State San Benito, California
PART II *(To be completed by NRCS)*	Date Request Received By NRCS

Does the site 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 ☐		Acres Irrigated 29,589	Average Farm Size 982
Major Crop(s) Lettuce, Peppers, Broccoli	Farmable Land In Govt. Jurisdiction Acres: unknown %	Amount Of Farmland As Defined in FPPA Acres: 86,937	% 10
Name Of Land Evaluation System Used California Storie Index	Name Of Local Site Assessment System None	Date Land Evaluation Returned By NRCS 2/25/05	

		Alternative Site Rating			
PART III *(To be completed by Federal Agency)*		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		148.0	93.0	139.0	
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site		148.0	93.0	139.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		143.0	91.0	135.0	
B. Total Acres Statewide And Local Important Farmland		3.0	2.0	4.0	
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 Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*		93	90	92	0
PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use	15	15	15	15	
2. Perimeter In Nonurban Use	10	10	10	10	
3. Percent Of Site Being Farmed	20	20	20	20	
4. Protection Provided By State And Local Government	20	20	20	20	
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average	10	0	0	0	
8. Creation Of Nonfarmable Farmland	25	0	0	0	
9. Availability Of Farm Support Services	5	4	4	4	
10. On-Farm Investments	20	18	18	18	
11. Effects Of Conversion On Farm Support Services	25	0	0	0	
12. Compatibility With Existing Agricultural Use	10	7	7	7	
TOTAL SITE ASSESSMENT POINTS	160	94	94	94	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	93	90	92	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	94	94	94	0
TOTAL POINTS *(Total of above 2 lines)*	260	187	184	186	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

Form AD-1006 (10-83)

This form was electronically produced by National Production Services Staff

Appendix G Photographs at The Alameda and Mission Farm RV Park

The San Juan Elementary School north of State Route 156 and east of The Alameda.

The single-family residential development west of the project limits and the hotel south of State Route 156 on The Alameda.

The Mission Farm RV Park south of State Route 156 on San Juan Hollister Road

Appendix H Construction Equipment Emissions

Table H.1 Estimated Construction Emissions (vehicles)

Factor	Alternative (day/quarter)		
	2	**4A**	**6**
CO	72/6.0	47/3.8	62/5.2
ROG	18/1.5	11/0.9	16/1.3
NOx	143/11.9	84/6.9	126/10.5
PM_{10}	24/2.0	15/1.2	21/1.8

Revised 8/19/04

Table H.2 Estimated Construction Emissions (asphalt use)

Factor	Alternative		
	2	**4A**	**6**
Total asphalt concrete (tons)	109,129	54,123	88,185
Emulsion (.0025% AC) (tons)	273	135	220
Asphalt (6% of AC, 65% of emulsion) (tons)	6548+177	3247+88	5291+143
ROG (.04 lb/ton ac) (lb.)	269	133	217
Days paving (Construction Emission sheets)	109	54	88
Daily emissions of ROG (lb.)	2.5	2.5	2.5
Quarterly emissions of ROG (tons)	.083	.083	.083

Revised 8/19/04

Table H.3 Estimated Construction Emissions (PM_{10} from grading)

Activity	Alternative		
	2	**4A**	**6**
Total area to grade (acres)	173	111	168
Exposed for (quarters)	8	8	8
Active daily grading (acres)*	1.3	.84	1.3
Quarterly PM_{10} (tons)**	2.9	1.9	2.9
Total PM_{10} (Tons)	23	15	23

Revised 8/19/04
*Assumes each acre graded 4 times
** At 68 pounds per acre per day, 66 days grading/quarter

Table H.4 Estimated Quarterly Construction Emissions (in tons)

Factor	Air District Threshold		Activity	Alternative		
	Daily (Pounds)	**Quarterly (Tons)**		**2**	**4A**	**6**
CO	NA	NA	Vehicles	6.0	3.8	5.2
ROG	NA	NA	Vehicles	1.5	0.9	1.3
ROG			Asphalt	0.1	0.1	0.1
Nox	NA	NA	Vehicles	11.9	6.9	10.5
PM_{10}	85 lb	2.5 tons	Vehicles	2.0	1.2	1.8
PM_{10}			Grading	2.9	1.9	2.9

Revised 8/19/04

Appendix I Minimization and/or Mitigation Summary

Resource	Level of Significance	Permit or Approval
Farmland	Significant	None
Minimization and/or Mitigation Measures		
It is not possible to avoid farmland impacts with any of the Build Alternatives; however, Alternative 4A requires the least amount of acquisition.		

Resource	Level of Significance	Permit or Approval
Relocations	Non-significant	None
Minimization and/or Mitigation Measures		
The project requires additional right-of-way and may result in the relocation of one non-residential building or storage shed, a well, and a pump house. At the time of acquisition, when relocation would become necessary, all activities would then be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended (see Appendix D).		

Resource	Level of Significance	Permit or Approval
Utilities	Non-significant	None
Minimization and/or Mitigation Measures		
The following utilities would require relocation: • Pacific Gas and Electric power poles and associated overhead lines. Pacific Gas and Electric also operates a 12-inch underground high-pressure gas line in the project area. Frontage road relocations at Cagney and Bixby roads would affect both the overhead electric and buried gas lines. • Pacific Bell telephone poles and associated overhead lines. Pacific Bell also has two fiber optic lines and two copper lines in the south shoulder of the existing highway. • Charter Communications provides cable television access to the proposed project area. Charter has seven poles on a private easement. • San Benito Water District operates a 27-inch to 30-inch waterline and associated laterals. This waterline is on a private easement.		

Resource	Level of Significance	Permit or Approval
Traffic Circulation	Non- significant	None
Minimization and/or Mitigation Measures		
A comprehensive Traffic Management Plan to minimize delays will be developed after selection of the Build Alternative. Advance media announcements will be made to alert the public of construction staging and potential delays during construction. Standard Caltrans construction practices include information on roadway conditions, portable changeable message signs, lane and road closures, advance warning signs, alternate routes, reverse and alternate traffic control, and a traffic contingency plan for unforeseen circumstances and emergencies. Prior to construction, Caltrans would meet with local public officials to review the plan as well as publicize plan details. Construction may be scheduled to avoid areas that need access during certain seasons, such as harvest season.		

Resource	Level of Significance	Permit or Approval
Scenic Resources	Non-significant	None
Minimization and/or Mitigation Measures		
Mitigation of the proposed alternatives based on the Visual Quality Assessment and local community planning guidelines is discussed in Section 2.1.7-Visual/Aesthetics. Mitigation measures would involve grading and structures, materials and aesthetic treatments, landscaping, and erosion control.		

Resource	Level of Significance	Permit or Approval
Cultural Resources	Non-significant	None
Minimization and/or Mitigation Measures		
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 were discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission, which would then notify the Most Likely Descendent. At this time, the person who discovered the remains would contact the Central Coast Specialist Branch, San Luis Obispo, so that they may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.		

Resource	Level of Significance	Permit or Approval
Floodplain/Hydrology	Non-significant	None
Minimization and/or Mitigation Measures		
New cross culverts will be required between Mission Vineyards Road and Lucy Brown Lane to mimic current flooding patterns now occurring at the highway. This project should also include the installation of a sufficient number of additional cross culverts to safely pass all water with the potential to back up against any proposed new alignments. Once construction details are prepared, a hydraulic analysis needs to be made to assess any changes in profile grade and/or the width of the highway profile, which could result in changes to the existing flood zones. Caltrans intends to engineer this project to separate onsite and offsite drainage. All highway drainage will be disposed of via a new drainage collection system, and all offsite water will flow per the existing drainage patterns. Also, proposed sound walls between The Alameda and Mission Vineyard Road will require special floodplain engineering consideration.		

Resource	Level of Significance	Permit or Approval
Water Quality	Non-significant	Clean Water Act: Section 402 permit

Minimization and/or Mitigation Measures

By incorporating proper and accepted engineering practices and Best Management Practices, the proposed project would have minimal impacts to water quality during construction. During construction, a Storm Water Pollution Prevention Plan would be implemented to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges. The plan would also serve to describe and ensure the implementation of Best Management Practices to reduce or eliminate sediment and other pollutants in storm water, as well as non-storm water, discharges. A Storm Water Management Plan would be required to minimize long-term water quality impacts. Caltrans has currently implemented the statewide Storm Water Management Plan addressing runoff impacts on water quality standards, development of Total Maximum Daily Loads, and watershed planning.

During the construction phase, the contractor is responsible, as stated in Caltrans' Standard Specifications Section 7-1.01G, for taking the necessary steps to eliminate potential impacts during construction.

Standard Specifications Section 7-1.01G requires the construction contractor to implement pollution control practices related to construction projects via a Water Pollution Control Program or a Storm Water Pollution Prevention Plan, as noted above.

The proposed project would disturb more than one acre of soil and the following would be required:

- A Notification of Construction would be submitted to the appropriate Regional Water Quality Control Board at least 30 days before the start of construction. The Notification of Construction form requires a tentative start date and duration, location, description of project, estimate of affected area, and name of resident engineer (or other construction contact) with telephone number, etc.
- A Storm Water Pollution Prevention Plan would be prepared and implemented during construction to the satisfaction of the resident engineer.
- A Notice of Construction Completion would be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project will be considered complete when the criteria for final stabilization in the State General Construction Permit are met.

Resource	Level of Significance	Permit or Approval
Geology/Soils/Seismic/Topography	Non-significant	None

Minimization and/or Mitigation Measures

Once a preferred alternative is selected and a rough profile grade has been established, a Geotechnical Design Report will be requested to determine final design recommendations. In addition, during the design of the project, consideration would be given to the stability and settlement of embankments, particularly at the approaches to structures.

Resource	Level of Significance	Permit or Approval
Hazardous Waste	Non-significant	None
Minimization and/or Mitigation Measures		
Due to the measurable but less than regulatory threshold presence of lead in the soil, project specific Non-Standard Special Provisions for aerially deposited lead that address worker health and safety are included in the Initial Site Assessment. The contractor would provide a project specific Lead Compliance Plan to prevent or minimize worker exposure to dust while handling material containing aerially deposited lead.		

Resource	Level of Significance	Permit or Approval
Air Quality	Non-significant	None
Minimization and/or Mitigation Measures		

The daily and quarterly grading acreage appears to be within the Air Pollution Control District thresholds. However, the following minimization measures are recommended in addition to the daily watering of all disturbed areas required by Caltrans Standard Specifications:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure
- Prohibit all grading activities during periods of high wind (over 15 mph)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro-seed area
- Maintain at least 2.0 feet of "freeboard" (space between the surface of the load and top of the truck bed) in haul trucks.
- Cover all trucks hauling dirt, sand, or loose materials
- Plant windbreaks on the windward side of construction projects adjacent to open land
- Plant vegetative cover in disturbed areas as soon as possible
- Cover inactive storage piles
- Sweep streets if visible soil is carried out from the construction site
- Limit the area under construction at any one time
- The contractor would use on-road diesel fuel approved by the California Air Resources Board in diesel construction vehicles when it is locally available.

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. Typical dust and emission control methods include watering the construction site, runoff and erosion control, traps on diesel-exhaust systems, and emission-control retrofits on older, higher polluting vehicles. These impacts are addressed through Caltrans standard specifications, Section 7-1.0F, "Air Pollution Control" and Section 10, "Dust Control."

Resource	Level of Significance	Permit or Approval
Noise	Non- significant	None
Minimization and/or Mitigation Measures		
To abate existing and projected future noise impacts at the Mission Farm RV Park, a 9-foot-tall barrier is recommended. The barrier would be located 10 to 15 feet off the edge of the traveled way for eastbound traffic and would be placed on a retaining wall. This barrier would provide 5- to 7-dBA reduction for the first row of receptors in the park. The Project Development Team makes the final determination of whether or not a barrier is cost effective or "reasonable" to build. The final determination on whether or not a barrier is constructed lies with the affected owner(s). The final decision of the noise abatement will be made upon completion of the project design and the public involvement processes. Measures to minimize construction noise are described in Section 2.2.6.		

Resource	Level of Significance	Permit or Approval
Biology	Non-significant	The Clean Water Act: Sections 401 permit Section 404 permit Section 1602 permit
Minimization and/or Mitigation Measures		
▪ Environmentally Sensitive Area fencing would be used to exclude western pond turtles from the work area during construction. The proposed project may require the relocation of any western pond turtles found in the work area during construction of the bridge at San Juan Creek (see Figure 2-4). A qualified biologist would monitor the project area during construction activities that occur in this portion of the project. If any turtles were found they would be returned to a safe part of San Juan Creek or the drainage ditch, well away from construction activities. All riparian areas affected by the project would be replanted with willows to the maximum extent practical. At minimum, enough area would be planted to ensure that there would be no net loss of aquatic or riparian habitat as a result of this project. ▪ Measures to avoid or minimize the impacts to California red-legged frogs are described in Section 2.3.5. ▪ There is a potential for impact to adult salamanders during construction because the project footprint is within the 1.24-mile dispersal distance from known California tiger salamander breeding ponds. Therefore, the upland habitat within the non-natïve grasslands at the Union Road/State Route 156 intersection would be designated as an Environmentally Sensitive Area and fenced to avoid potential impacts. ▪ In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as noxious weeds. Trucks with loads carrying vegetation would be covered, and vegetative materials removed from the site would be disposed of in accordance with applicable laws and regulations. In areas of particular sensitivity, extra precautions will be taken if invasive species are 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. ▪ New ditches would be constructed parallel to the existing ditches. Willows are to be planted along the new ditches to the maximum extent practicable. Wetlands were identified adjacent to State Route 156 within the limits of the proposed project. Environmentally Sensitive Area fencing will be placed around these wetlands to ensure that there will be no impacts.		

Appendix J Project History and Status

State Route 156 is classified as a Rural Minor Arterial from U.S. 101 (post mile 0.1) to State Route 152 (post mile 18.4). The highway, designated as a Federal Aid Primary Route, is on the Freeway and Expressway System, although most of it is conventional highway.

State Route 156 was built in 1961 as a two-lane conventional highway, with plans for eventual expansion to four lanes. In 1965, the highway was expanded to a four-lane expressway from the interchange at U.S. 101 (post mile 0.1) to Monterey Street in San Juan Bautista (post mile 2.3).

The County of San Benito initiated this project on State Route 156 as part of the Regional Transportation Plan to decrease congestion and delays. This project is sometimes referred to as the "Gap" because of completed highway projects located at each end of the project area. The completed projects were partially funded through the 1988 State Transportation Improvement Plan. The local share of funding for these projects came from San Benito County Measure A, which was passed through a voter initiative in 1988. The measure adopted a half percent (0.5 percent) increase in sales tax for the purpose of transportation improvements. The measure generated approximately $15.5 million over its 10-year life, which ended in 1999. Approximately $10 million remain in the fund for short-term projects in this year's Regional Transportation Plan. The two state highway projects stipulated by the measure were:

- State Route 156 (post mile 2.3/3.3) - Extended the four-lane expressway on State Route 156 from the existing four-lane expressway to a location just east of The Alameda. This project included the installation of a traffic signal at the intersection of State Route 156 and The Alameda. This project was completed in November 1995.
- State Route 156 (post mile 7.3/R14.3) - Construction of a two-lane expressway on a new alignment known as the Hollister Bypass. This project was completed in 1997.

Appendix K Floodplain Maps

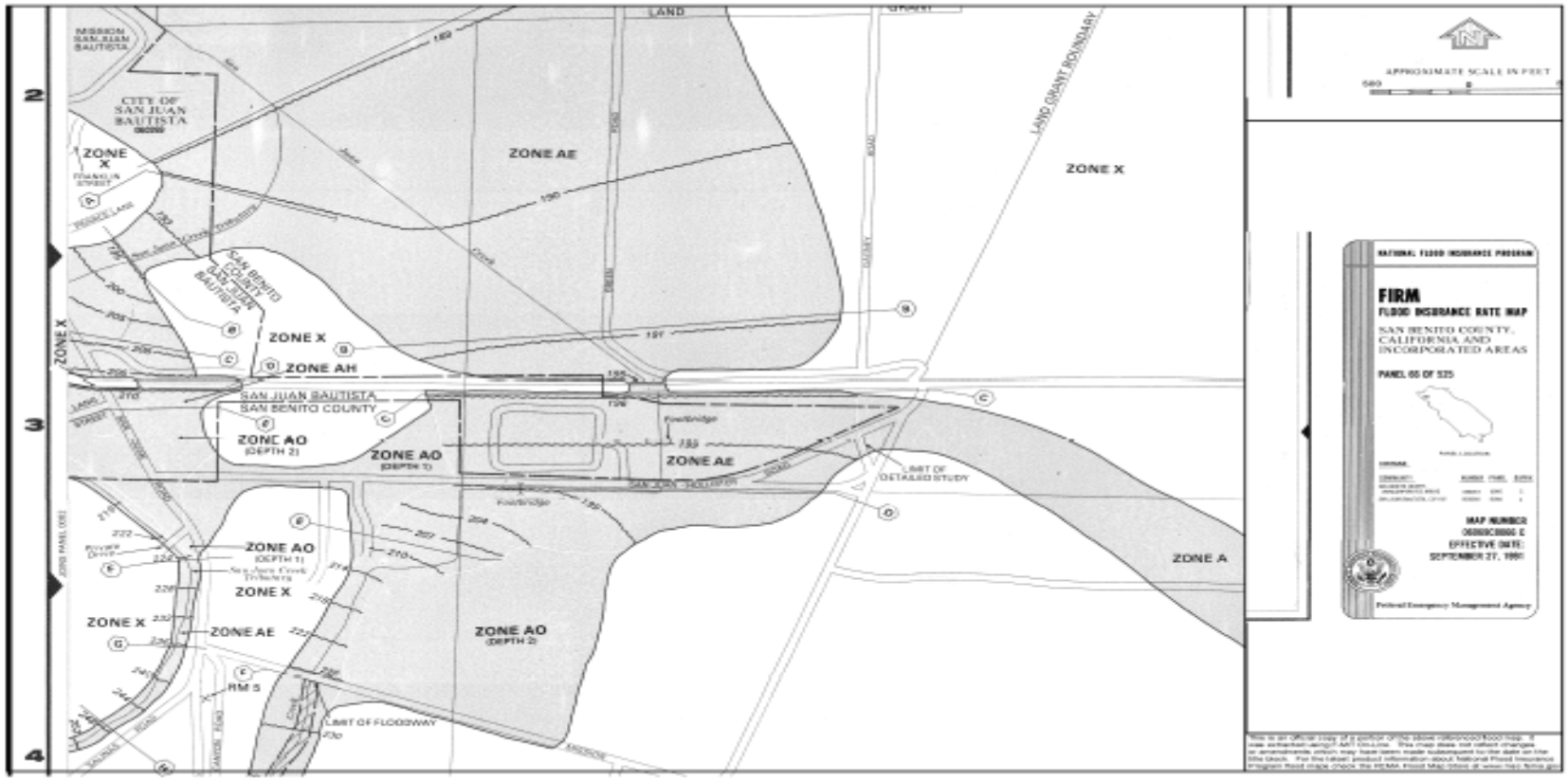

Figure K-1 Floodplain Zones near the City of San Juan Bautista

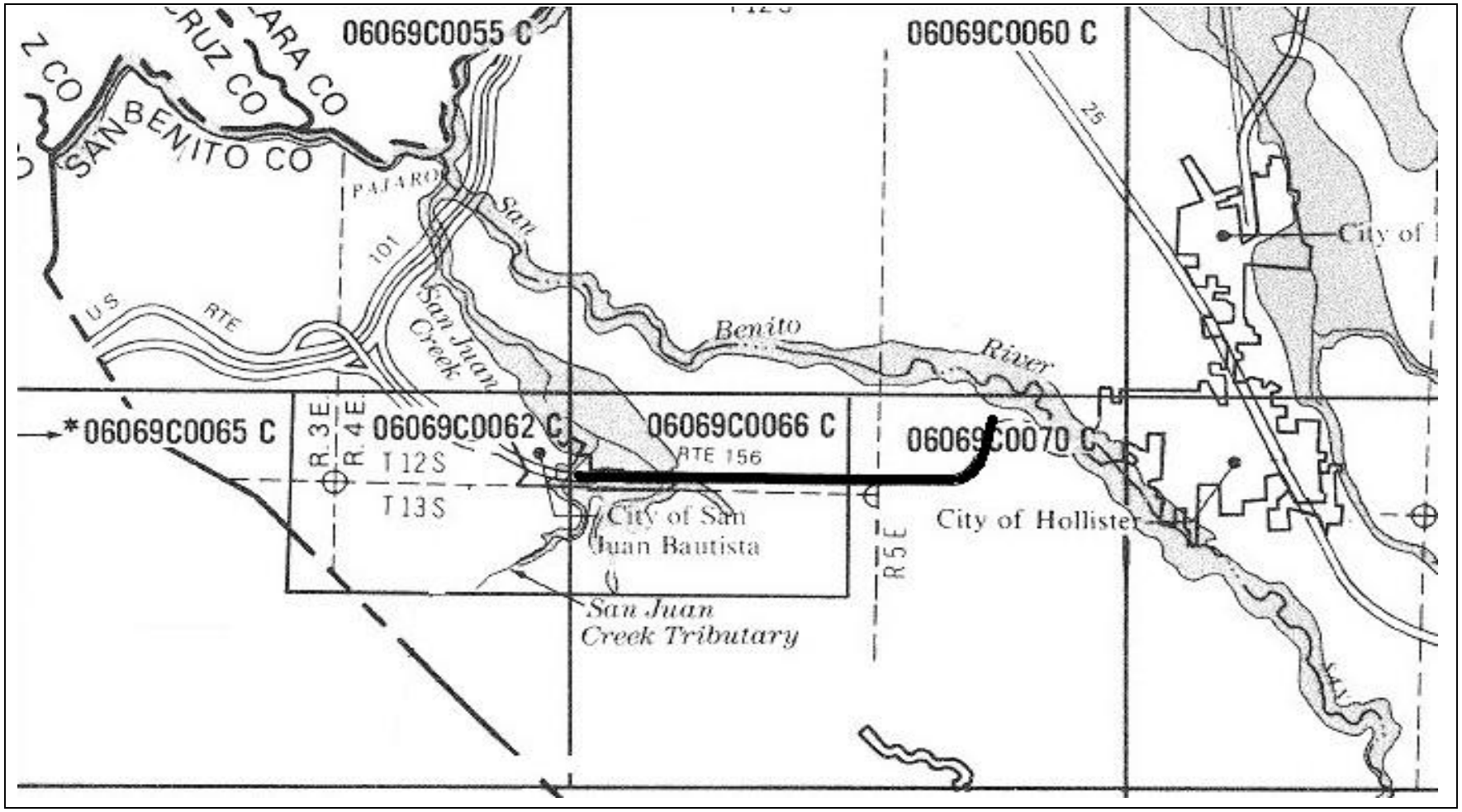

Figure K-2 Floodplain Zones of the project area

List of Technical Studies Bound Separately

Volume I

Air, Noise, and Paleontology Technical Reports, March 2007

Initial Site Assessment, January 2005

Location Hydraulic Study, February 2004

Natural Environment Study, May 2007

Relocation Impact Memorandum (Draft/Final), May 2004

Visual Impact Assessment, June 2007

Water Quality Assessment Report, April 2003; updated June 2007

Community Impact Assessment, August 2004

Volume II

Historic Property Survey Report, November 2002
Supplemental May 2007