

Proposed YOLO 16/County Road 93

Left Turn Pocket Project

Proposed Left Turn Lane Installation Project on State Route 16 and County Road 93, in
Yolo County, California.

District 3--Yolo County--State Route 16--[K.P. 56.6/57.3] (P.M. 35.2/35.6)
EA 03-0E39000

Initial Study with proposed Negative Declaration



Prepared by the
State of California Department of Transportation



April 2005



General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project located in Yolo 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, and potential impacts from each of the alternatives, and the proposed avoidance, minimization and/or mitigation measures.

What should you do?

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 2389 Gateway Oaks Drive.
- We welcome your comments. If you have any concerns regarding the proposed project, send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

Jeremy Ketchum, Chief
Office of Environmental Management, Sacramento S-1
California Department of Transportation
2389 Gateway Oaks Drive, 1st floor
Sacramento, CA 95833

Submit comments via email to: Jeremy_Ketchum@dot.ca.gov.

- Submit comments by the deadline: June 2, 2005.

What happens next?

After comments are received from the public and reviewing agencies, Caltrans and 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.

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: Jeremy Ketchum, Office of Environmental Management S-1, 2389 Gateway Oaks Drive, 1st floor; Sacramento, CA 95833; (916) 274-0621 Voice, or use the California Relay Service TTY number, 1 (800) 735-2929.

SCH# _____
District 3-State Route 16-KP 56.6/57.3
PM 35.2/35.6
EA 0E39000

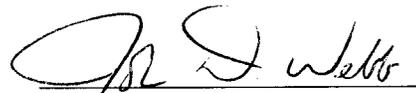
The project proposes to construct a left turn lane and add shoulders on State Route (SR) 16 in Yolo County. The work will be approximately 0.25 miles in length on each side of County Road 93 (PM 35.4).

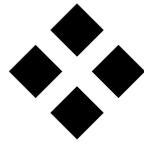
INITIAL STUDY

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

THE STATE OF CALIFORNIA
Department of Transportation

26 April 2005
Date of Approval


JOHN D. WEBB, Chief
North Region Environmental Services
California Department of Transportation



Proposed
Mitigated Negative Declaration
Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to construct a left turn lane and add shoulders on State Route (SR) 16 in Yolo County. The work will be approximately 0.25 miles in length on each side of County Road 93 (P.M. 35.4).

Determination

Caltrans has prepared an Initial Study for this project expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The project will have no impact to aesthetics, air quality, cultural resources, geology/soils, hazardous waste, hydrology and water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities.

The project will have a less than significant impact or effect to community resources, and farmlands.

The project will have less than significant impacts to biological resources with the incorporation of:

1. The purchase of Swainson's Hawk Foraging Habitat Credits from California Department of Fish and Game (CDFG) approved Conservation Program.
2. Restrict timing of Woody Vegetation Removal.
3. Pre-Construction Surveys and Construction Monitoring for Swainson's Hawk.
4. Construction Personnel Environmental Awareness Training.
5. Construction to be conducted during the "Post Fledging" Period of the Swainson's Hawk.
6. Restriction of Staging and Stockpile Areas.
7. The project will require an Incidental Take Permit (ITP) for potential impacts to the Swainson's Hawk, a State-Listed Threatened species pursuant to Sections 2081 (b) and (c) of the California Endangered Species Act. Any additional measures included in the ITP will be incorporated into this project.

JOHN D. WEBB
North Region Environmental Services
California Department of Transportation

Date

Table of Contents

Chapter 1	Proposed Project	1
1.1	Introduction.....	1
1.2	Purpose and Need	1
1.3	Alternatives.....	1
1.6	Permits and Approvals Needed.....	9
Chapter 2	Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures	11
2.1	Human Environment.....	12
2.2	Consistency with State, Regional and Local Plans.....	13
2.3	Community Impacts.....	16
2.4	Biological Environment.....	19
2.5	Construction Impacts	35
Chapter 3	Comments and Coordination	37
Chapter 4	List of Preparers.....	39
Appendix A	CEQA Checklist.....	41
Appendix B	Title VI Policy Statement.....	53
Appendix C	Minimization and/or Mitigation Summary	55
Appendix D	List of Technical Studies that are Bound Separately	59

List of Figures

Figure 1-Project Location	3
Figure 2a-Alternative 1: Widen to the North.....	5
Figure 2b-Alternative 2: Widen Both Sides.....	6
Figure 3a-Typical Cross Section (Proposed Project).....	7
Figure 3b-Typical Cross Section (Proposed Project).....	8
Figure 4a-Layout Sheet 1	28
Figure 4b-Layout Sheet 2.....	29

List of Tables

Table 1: Sensitive Species Considered as Part of Environmental Review	21
---	----

List of Abbreviated Terms

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CR	County Road
CFR	Code of Federal Regulations
FHWA	Federal Highway Administration
KP	kilometer post
NEPA	National Environmental Policy Act
PM	post mile
SR	State Route
CDC	California Department of Conservation
CDFG	California Department of Fish and Game
PDT	Project Development Team
FESA	Federal Endangered Species Act (FESA)
USACE	United States Army Corps of Engineers
SHOPP	State Highway Operation Protection Program
FPPA	Farmland Protection Policy Act
FY	Fiscal Year
USC	United States Code

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) in conjunction with the Federal Highway Administration (FHWA) is planning roadway improvements along State Route 16 in Yolo County (Figure 1-Project Location). The work will be approximately 0.25 miles in length on each side of County Road 93 (PM 35.4). The existing facility, within the project limits is a two lane undivided conventional highway, with a speed limit of 55 mph classified as a minor arterial. The lanes are 3.6 meters (12 feet) in width with shoulders 0.3 to 0.6 meters (1 foot to 2 foot) in width. The project is located in a rural area. The road runs through relatively flat portion of the valley surrounded by hilly terrain.

1.2 Purpose and Need

1.2.1 Purpose

The project proposes to reduce accidents by constructing a left turn lane and add shoulders on State Route (SR) 16 in Yolo County.

1.2.2 Need

Yolo County has experienced rapid growth in land use and increases in traffic volume in recent years. Part of the increase in volume, is due to a gaming casino located in Capay that attracts motorists from many parts of California. A pattern of accidents has been identified from on State Route (SR) 16 from post mile 35.2 to post mile 35.6, including the intersection. From the 5-year period beginning in January 1, 1999 to December 31, 2003, one fatality and seventeen accidents occurred within the project limits. Ten of the twelve accidents that have occurred during the five-year study period were considered run off the road accidents and are susceptible to correction by the proposed project.

1.3 Alternatives

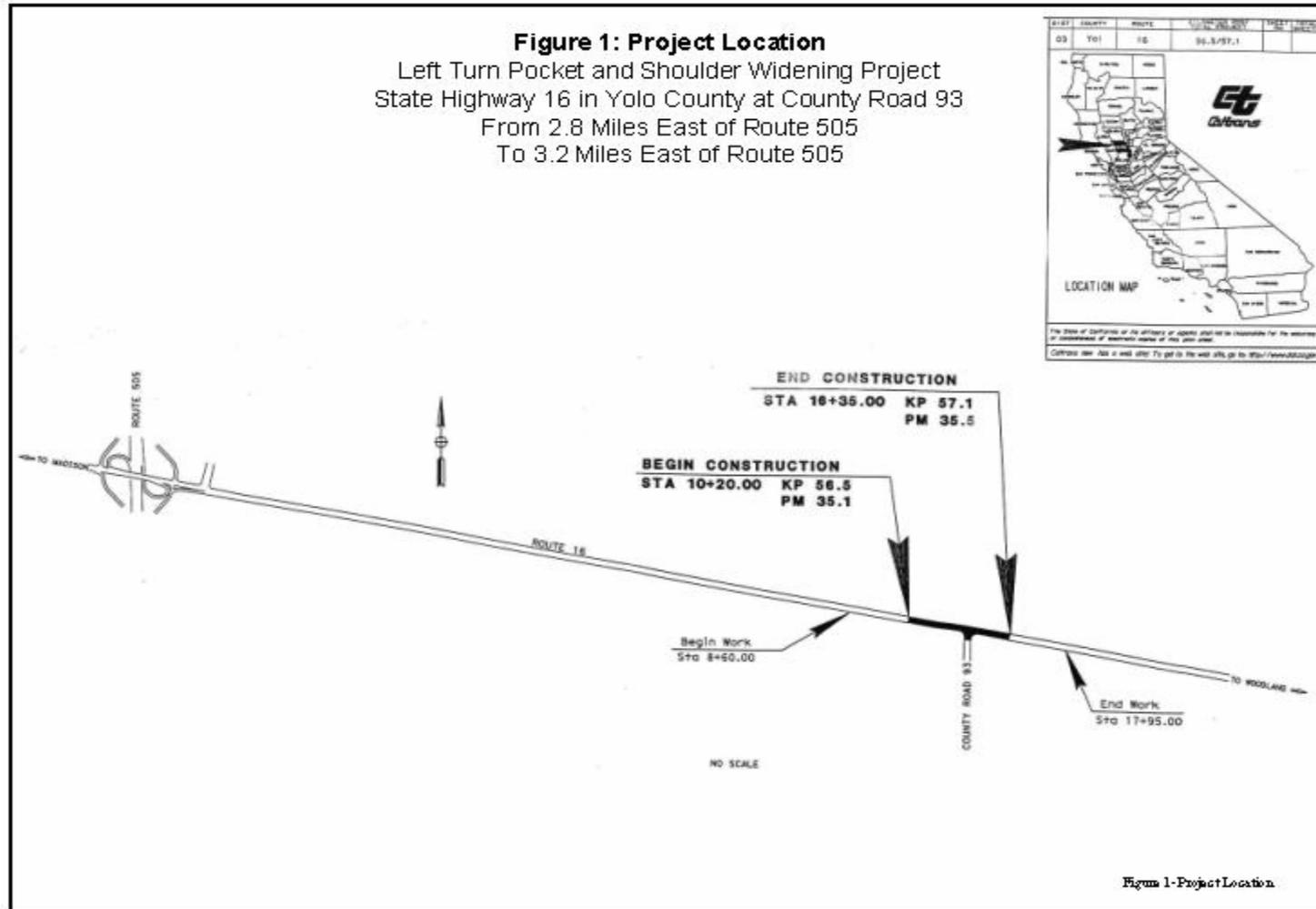
The three alternatives under consideration are: the No-Build, Alternative 1-Widen to the North, and Alternative 2-Widen Both Sides.

The project proposes to construct a left turn lane, add shoulders and improve horizontal alignment on State Route (SR) 16 in Yolo County from Post Mile (PM) 35.2 to 35.6 in order to improve safety. Costs have been estimated at \$850,000 for construction and \$196,000 for right of way and utility location. This project will be funded from the 2004 amended State Highway Operation Protection Program

(SHOPP) under the Safety Improvement program in the 05/06 FY at an estimated cost of \$1,046,000. Federal funds will also be used in this proposed project.

The project has a calculated safety index of over 200, which qualifies it as a Safety project under the Highway Safety Improvement Program Guidelines.

Figure 1-Project Location



1.3.1 No-Build Alternative

The No-Build Alternative would result in no safety improvements at the project location and does not meet the purpose and need.

1.3.2 Alternative 1-Widen To The North Only

This alternative proposes widening on the north side only. This alternative will consist of a left turn pocket for County Road 93, and shoulder widening to 8 feet (2.4 meters) (Refer to Figure 2a).

1.3.3 Alternative 2-Widen Both Sides (Proposed Project)

This alternative proposes widening 8 feet (2.4 meters) shoulders on both sides of the road within the project limits and constructing a left turn pocket for County Road 93. Ditch relocations will be done on both sides of SR 16 in order to accommodate the new horizontal alignment (Refer to Figures 2b, 3a & 3b).

1.4 Comparison of Alternatives

The No-Build Alternative-This alternative will not reduce the number of accidents at the project location.

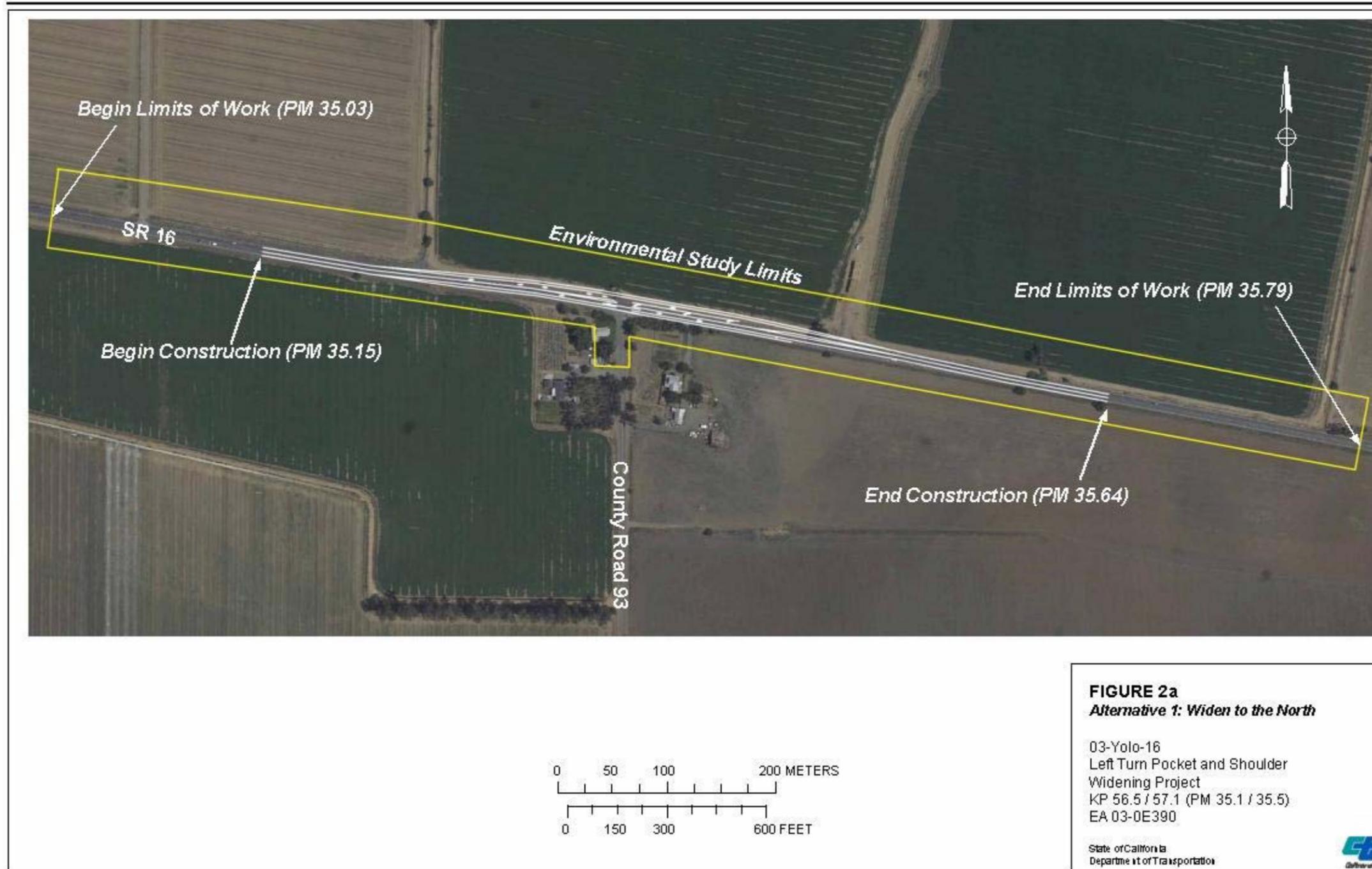
Alternative 1 (Widen to the North)-will require greater length to rejoin with State Route 16 and require some ditch work on the south side of the road to establish a clear recovery zone.

Alternative 2 (Widen Both Sides)-The widening to both sides of the road way is the preferred alternative. This alternative will minimize impacts to the house on the southwest corner of State Route 16/County Road 93 and also minimize the length of the project.

1.5 Alternatives Considered But Rejected

Alternative 1 (Widening to the North)-The widening to the north only is not the preferred alternative due to the fact that it would require greater length to rejoin with State Route 16, and the reduction of the Safety index to a point where the project would no longer be viable.

Figure 2a-Alternative 1: Widen to the North



April 2005

Figure 2b-Alternative 2: Widen Both Sides



April 2005

Figure 3a-Typical Cross Section (Proposed Project)

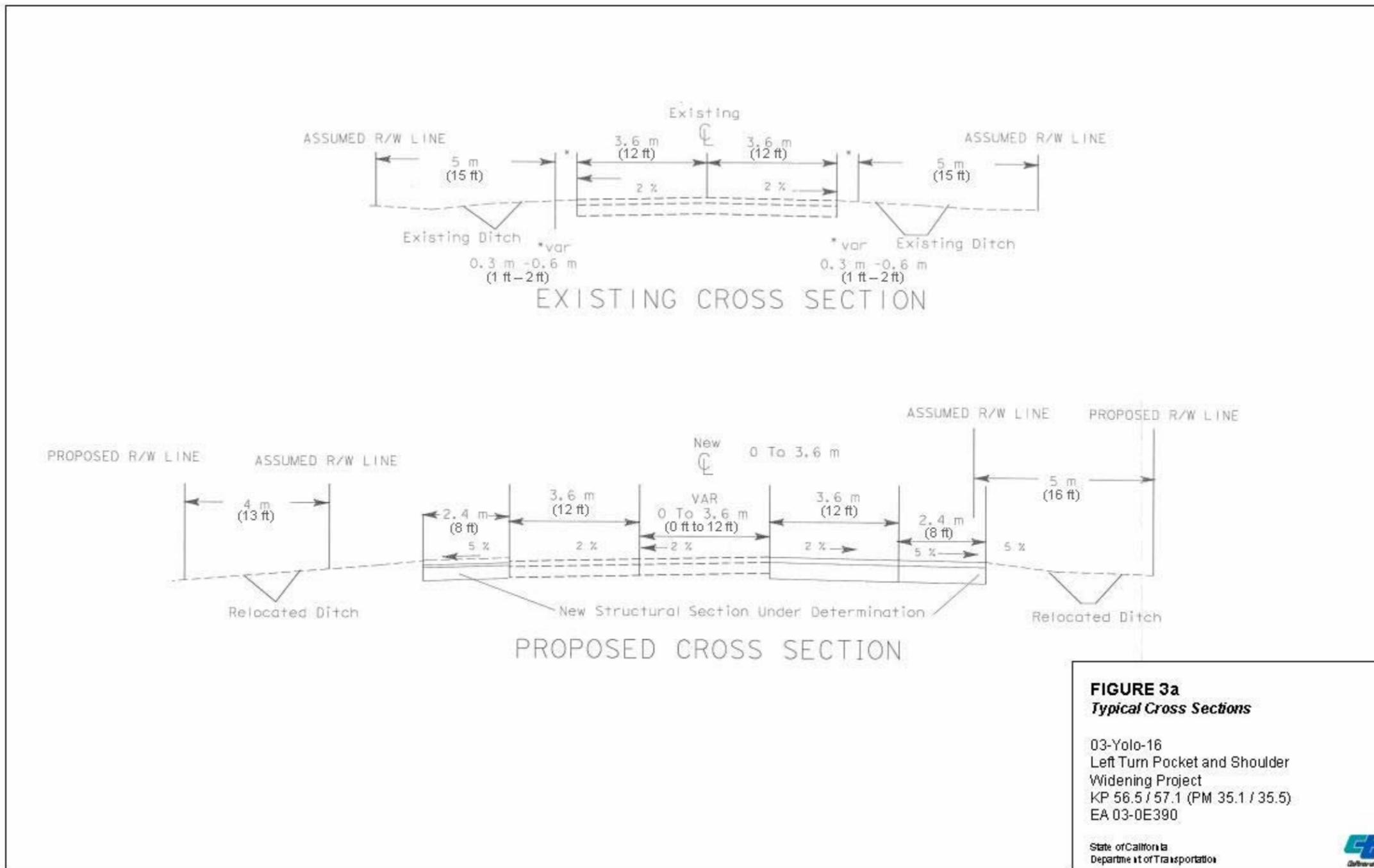
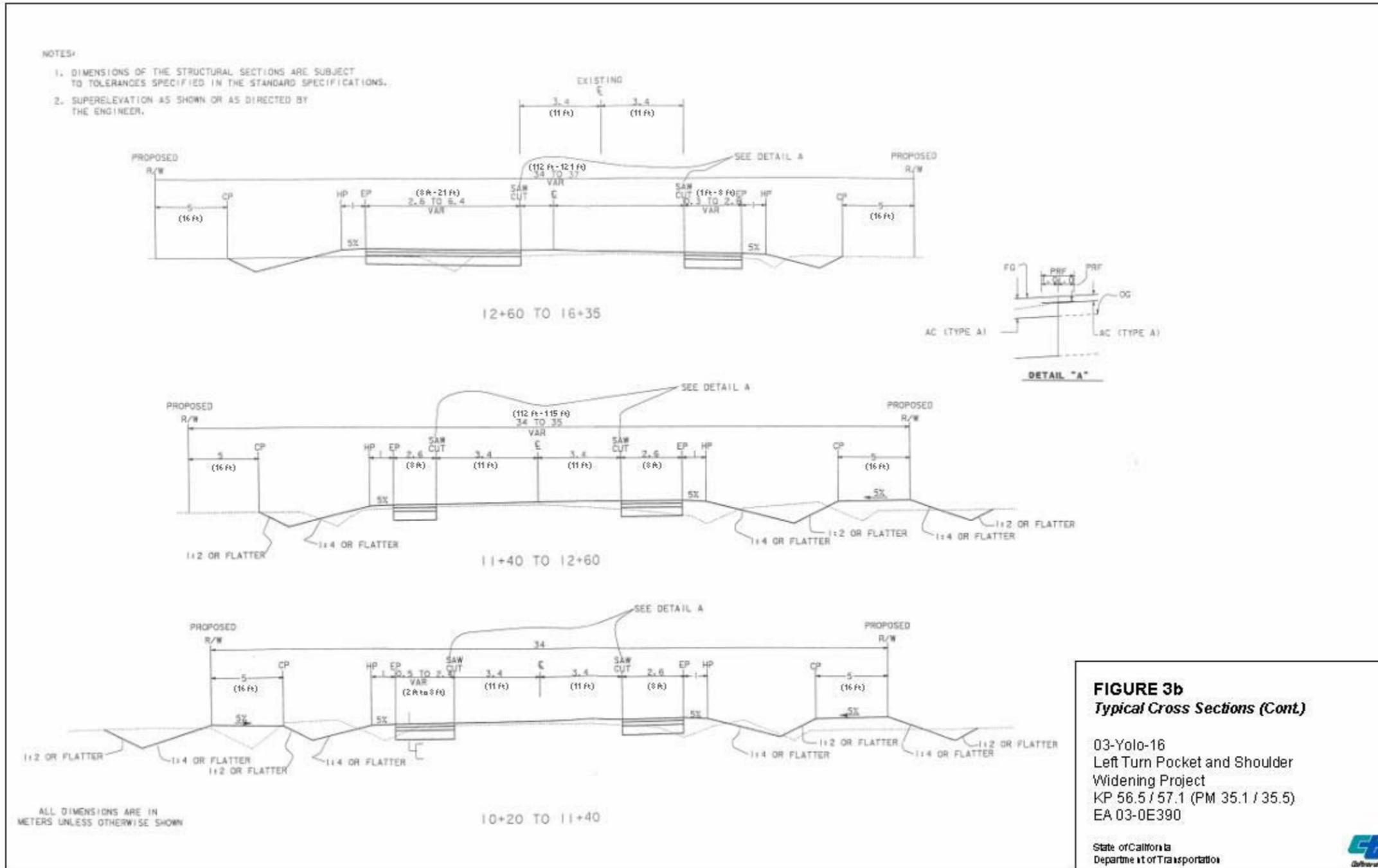


FIGURE 3a
Typical Cross Sections
 03-Yolo-16
 Left Turn Pocket and Shoulder
 Widening Project
 KP 56.5 / 57.1 (PM 35.1 / 35.5)
 EA 03-0E390
 State of California
 Department of Transportation

April 2005

Figure 3b-Typical Cross Section (Proposed Project)

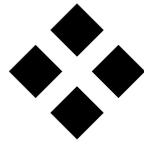


April 2005

After comparing and weighing the benefits and impacts of all of the feasible alternatives, the project development team (PDT) has identified Alternative 2 as the preferred alternative. Therefore, impact discussions in Chapter 3 are focused on the effects of Alternative 2.

1.6 Permits and Approvals Needed

- The proposed project shall adhere to the conditions of the Caltrans Statewide NPDES Permit Order #99-06-DWQ, #CAS000003, issued by the State Water Resource Control Board. Adherence to the compliance requirements of the NPDES General Permit Order #99-08-DWQ, #CAS000002, for General construction Activities is also required.
- Section 2081 (b) and (c) of the California Endangered Species Act allow the California Department of Fish and Game (CDFG) to issue an incidental take permit for a State listed threatened and endangered species only if specific criteria are met. Currently, the CDFG is reviewing Caltrans' request for an "Incidental Take" permit for potential impacts to the Swainson's Hawk, a State-Listed Threatened species.



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

This chapter explains the impacts that the project would have on the human, physical and biological environments in the project area. It describes the existing environment that could be affected by the project and potential impacts from each of the alternatives.

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

- Growth
- Utilities/Emergency Services
- Traffic and Transportation/Pedestrian and Bicycle Facilities
- Cultural Resources
- Hydrology and Floodplain
- Water Quality and Stormwater Runoff
- Geology/Soils/Seismic/ Topography
- Paleontology
- Hazardous Waste/Materials
- Air Quality
- Noise and Vibrations
- Natural Communities
- Wetlands and other Waters
- Plant Species

- Animal Species
- Invasive Species

2.1 Human Environment

2.1.1 Land Use

Existing and Future Land Use

Disruption of Orderly Planned Development

The proposed project would not disrupt orderly planned development in this area. The zoning for this area limits the area's development potential and encourages future agricultural activity. While the project would require the use of some prime and unique farmlands, these acquisitions would not disrupt future farm activity in this area.

Affected Environment

There are two zoning classifications in the project area: Agricultural (A-1) and Agricultural Preserve.

Legally, the minimum parcel size allowable in A-1 zones is 20 acres. However, parcel number 025-460-05, which is zoned A-1, is 1.8 acres in size, suggesting that the parcel was grandfathered into this zoning category. Approximately 128,000 acres in Yolo County are zoned A-1.

In AP zones, the minimum parcel size is 80 acres, if the land is irrigated, and 160 acres in non-irrigated areas. These minimum parcel sizes are designed to ensure that parcels are large enough to sustain agricultural production while minimizing impacts on adjacent non-agricultural parcels. In the project area, the parcels zoned for AP use range in area from 150 to 350 acres.

Yolo County General Plan

The project area is located in unincorporated Yolo County. Land use in this area is controlled by the Yolo County General Plan, the most recent version of which was adopted in 1983. The Plan outlines a number of goals for the County, the most relevant of which are included below:

- Wise land use based on both physical and social characteristics of the County.
- Protect prime and other agricultural land from urban development.
- Provide for industrial growth in the County to provide employment, services, and tax base while minimizing hazards and nuisances and while conserving resources and agricultural lands.
- Maintain good road conditions.
- Provide for and encourage alternate transportation modes (bus, pedestrian, bike).

- Protect property values.

Impacts

Permanent Impacts

The proposed project would require the conversion of 3.7 acres of land currently zoned for AP use to highway use. Additionally, 0.08 acres of land zoned A-1 would be converted to highway use. Within the context of the County's total agricultural zoning, these quantities would be negligible.

Cumulative Impacts

A number of other projects in the area propose the conversion of agricultural land to non-agricultural uses, including other highway projects, casino-related development, and residential subdivisions in the area. However, the scale of the proposed project is such that it does not make a cumulatively considerable contribution to the overall impact of farmland conversion.

Avoidance, Minimization and/or Mitigation Measures

None required.

2.2 Consistency with State, Regional and Local Plans

Consistency with Local Plans and Policies

The Yolo County General Plan emphasizes the importance of farmland. Additionally, the County's Zoning Code requires private interests to offset the conversion of agricultural land by providing for conservation easements. The proposed project would result in the conversion of farmland adjacent to SR16 to highway use in both Agricultural and Agricultural Preserve zones. As a State agency, Caltrans is not required to comply with the local zoning code. This project is proposed as an enhancement to public safety. The magnitude to the farmland acquisitions required by this project are minor, relative to the size of the affected parcels; these acquisitions would not disrupt farming activities in this area.

The proposed project would be consistent with the circulation policies in the Yolo County General Plan. These policies emphasize safety, including that of bicycles and farm equipment operators. The proposed project is designed to improve safety for all roadway users. By providing turn lanes and standard shoulders, the project would make the roadway safer for farm vehicles and equipment needing more than the standard lane width while using the roadway.

2.2.1 Farmlands/Timberlands

Regulatory Setting

State CEQA *Guidelines* states that cancellation of Williamson Act contracts for parcels exceeding 100 acres is an action considered to be "of statewide, regional, or areawide significance," and thus subject to CEQA review.

California Land Conservation Act of 1965-The Williamson Act

The California Land Conservation Act of 1965 [Cal. Govt. Code S.51200-51295], commonly known as the Williamson Act, provides incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. Farmland need not be considered "prime" in order to be placed under provisions of the Williamson Act. All lands defined by the state as "prime farmland," "other than prime farmland," and "open space land" are eligible for coverage by a Williamson Act contract. Land other than prime farmland and open space land can be placed under contract if the lands are located in an area designated by the county or city as an agricultural preserve. The California Department of Conservation (CDC) estimates that more than half of the state's irrigated (mostly prime) farmland is protected by the Act.

California Government Code Section 51290(a) states that "It is the policy of the state to avoid, whenever practicable, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land therefore, in agricultural preserves."

Affected Environment

Yolo County

In the year 2000, Yolo County's agricultural production was worth approximately \$300 million dollars. Yolo County ranked 23rd in the state for agricultural production, with one percent of total statewide agricultural output. Top agricultural commodities include tomatoes, wine grapes, rice, and alfalfa hay.

Categories of Farmland

The California Department of Conservation and the NRCS classify agricultural lands into four categories: Prime Farmlands, Farmlands of Statewide Importance, Unique Farmland, and Farmland of Local Importance. It should be noted that classification as "farmland" does not necessarily mean the land has to actually be farmed. Instead, "farmland" is rated primarily on factors such as soil type and topography.

Both Prime and Unique Farmlands are present in the project area.

Prime Farmland is land that has the best combination of physical and chemical characteristics for producing agricultural crops and may include land currently used

as cropland, pastureland, rangeland, or forestland. It does not include land that is already in or committed to urban development.

Unique Farmland is land other than prime farmland that has lesser quality soils that are used for the production of high-value specialty crops (i.e., citrus, nuts). The Unique Farmland designation is, therefore, based on the type of crop grown as well as soil type.

Impacts

Williamson Act Lands

The SR16/CR93 intersection is surrounded on three sides by lands under current Williamson Act contracts. The following parcels are under Williamson Act contracts:

APN	ACREAGE	APPROX. RIGHT OF WAY TAKE REQUIRED (ACRES)
25-450-05	180.5	0.7
25-171-02	154	0.5
25-460-04	180.5	0.6

Because the farmland to both the north and south of State Route 16 is under Williamson Act contracts, the proposed project cannot be constructed without some conversion of Williamson Act lands. The project would require the use of 1.8 acres of land under Williamson Act contracts. The amount of land taken from each of the three parcels under Williamson Act contracts in the area would amount to approximately 0.3 percent of each parcel.

The proposed project would require the conversion of 3.7 acres of land currently zoned AP use to highway use. Additionally, 0.08 acres of land zoned A-1 would be converted to highway use. Within the context of the County's total agricultural zoning, these quantities would be negligible.

The proposed project would not result in the indirect conversion of farmland, by changing the land use in the area, altering the pattern of development, or creating inaccessible remainders of parcels.

Permanent Impacts

The proposed project would require the conversion of approximately 3.8 acres of farmland, of which 2.5 acres would be prime farmland and 1.3 acres would be unique farmland.

Farmland Conversion Impact Rating Form

Consultation with the federal Natural Resources Conservation Service (NRCS) was conducted, using the Farmland Conversion Impact Rating Form (Form AD-1006). While the area is well-protected against non-farm use by state and local regulations, the farmland parcels are small relative to the County's average, and there are no on-site investments (such as irrigation) visible. Additionally, Caltrans submitted Form AD-1006 to the NRCS in November 2004 and did not receive a response within 30 days. Based on Code of Federal Regulations Section 658.4 (a), Caltrans may proceed as though this land is not farmland for the purposes of the federal Farmland Protection Policy Act.

Cumulative Impacts

A number of other projects in the area propose the conversion of Prime and Unique Farmlands and Williamson Act lands to non-agricultural uses, including other highway projects, casino-related development, and residential subdivisions in the area. However, the scale of the proposed project is such that it does not make a cumulatively considerable contribution to the overall impact of farmland conversion.

Construction Impacts

Project construction would have minimal impacts on agricultural activities in this area.

A total of 1.15 acres of Unique Farmland, which is also under Williamson Act contracts, would be utilized for construction staging activities. Temporary construction easements (TCE) would be obtained from property owners to compensate them for the temporary loss of their land.

2.3 Community Impacts

Communities

The largest nearby community is the City of Woodland, a city of approximately 50,000 residents, located approximately five miles east along SR16. The closest community to the west is the small community of Madison, made up of approximately 850 residents, located four miles west, near the SR16/I-505 interchange. Esparto is also to the west, approximately 6 miles from the project area along SR16. Esparto is home to approximately 2,000 residents.

Circulation and Accessibility

SR16 is the primary east-west connection in this area. As the largest city in the area, Woodland is the destination for many of the trips originating in this area: Woodland has large grocery stores, a hospital and emergency room, and is the County seat. To

the west along SR 16 in Brooks is Cache Creek Casino, a relatively large casino that has recently expanded and attracts large numbers of visitors to this area.

Community Attitudes Toward Project

The resident of the home that would likely be most adversely affected by the proposed project is also a leading proponent of this project. The owner-occupant of the home to the southwest of the SR16/CR93 intersection has identified this intersection as extremely dangerous and supports efforts to improve it.

The No Build Alternative would not affect any aspect of the built environment, thus avoiding many of the project's adverse community impacts. However, this alternative would be at odds with the opinion expressed by the resident most likely to feel the project's adverse impacts.

Avoidance, Minimization and/or Mitigation Measures

- During construction, care must be taken to maintain in place as many of the existing trees and shrubs of the residence to the west of the intersection. Should the owner request; Caltrans is to provide replacement plants to be placed on the owner's property.
- If requested by the homeowner, Caltrans should provide a replacement-planting screen for the property to the east of the intersection. All replacement plants should be placed on private property and maintained by the homeowners.
- Construction noise and dust would impact the residents of the two homes located to the east and west of County Road 93, particularly the home to the west that is already fairly close to SR16. The implementation of Caltrans Standard Specifications would reduce noise and dust impacts.

2.3.1 Community Character and Cohesion

Regulatory Setting

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 area affected by the proposed project is limited to the immediate vicinity: the adjacent parcels.

Because the project's impacts are not likely to extend beyond the project's immediate surroundings, Census data were not utilized. Census data cannot provide sufficient

detail to be useful in the analysis of projects with limited impacts in sparsely populated areas. Additionally, the Wild Wings subdivision nearby has been under construction over the past several years – residents who will be living there at the time of construction would not have been included in the 2000 Census.

There are two residences located on the southwest corner of the SR16/CR93 intersection, an owner-occupied residence and a tenant-occupied residence. The single family home on the southeast corner of the intersection is tenant-occupied and was vacant as of this writing.

The Wild Wings subdivision, made up of 337 homes on 242 acres, is currently under construction to the northeast of the SR16/CR93 intersection.

Impacts

Neighborhood Impacts

The project would not require any residential relocations. The project would widen the SR16 / CR93 intersection. Site visits indicate that the number of vehicles using CR93 is relatively low: widening the intersection is not likely to result in a loss of community cohesion, in terms of creating a barrier between the only two residences in the area.

The project would require the use of 0.08 acres of land from the residence located to the southwest of the project intersection. This equates to 4.4 percent of this parcel's 1.8 acres.

As noted in the Visual Impact Assessment, a screen of oleanders provides a visual buffer from SR16 to the residence on the west side of the intersection. These oleanders (approximately ten) are planted at the property line and will have to be removed for construction and to correct sight distance and visibility.

Similarly, a tamarisk tree screen (approximately ten trees) is a visual buffer for the residence on the east side of the intersection. This screen was planted within the Caltrans right of way and must be removed to provide room for the project.

The resident with the closest proximity to the proposed project has expressed support for these safety improvements.

No minority or low-income populations have been identified that would be adversely impacted by the proposed project.

2.4 Biological Environment

Special Status Species Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NOAA Fisheries) and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with 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 below. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFW or NOAA 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

State laws and regulations pertaining to wildlife include the following:

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

In addition to state and federal laws regulating impacts to wildlife, there are often local regulations (example: county or city) that need to be considered when developing projects. If work is being done on federal land (BLM or Forest Service, for example), then those agencies' regulations, policies, and Habitat Conservation Plans are followed.

Migratory bird species are protected by the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The list of birds protected by this act appears in Title 50 of the Code of Federal Regulations, Section 10.13.

State listed species are expected to be impacted by the proposed project (Swainson's hawk), and therefore consultation with state resource agencies will be necessary in accordance with legal requirements set forth under sections 2050-2098 of the California Fish and Game Code. The following summarizes Caltrans' determinations for state listed species that may occur within the project vicinity:

- 1) Due to the project area being outside the range of the species, the lack of suitable habitat or habitat components in the project area, the lack of detection during recent Caltrans surveys, or because the project is minor in scope and would not harm individuals or alter the species' habitat, it is Caltrans' determination that the proposed project will have **"no effect"** on the following California State listed or proposed listed threatened or endangered species:

Bank Swallow (CT)

- 2) The proposed activities would result in some loss of habitat or reductions in the habitat quality or timing of nesting, roosting and/or foraging opportunities for the following species. The scale of this reduction and/or loss is small within the analysis area and design features and conservation measures exist to reduce both direct and indirect impacts. Therefore, it is Caltrans' determination that the proposed activities **"may affect but are not likely to adversely affect"** the following California State listed or proposed listed threatened or endangered species:

Swainson's Hawk (CT)

- 3) Due to the project area being outside the range of the species, the lack of suitable habitat or habitat components in the project area, the probable absence of a species from historic range, the lack of detection during recent Caltrans surveys or because the project is minor in scope and would not harm individuals or alter the species' habitat, it is Caltrans' determination that the proposed action will have **"no effect"** on the following California State Species of Special Concern:

Tricolored Blackbird (CSC)

Special Status Species

This section provides information on sensitive species that are known or may occur in the project vicinity. Table 1 on the next page lists all potential sensitive species compiled from CNDDDB lists, literature research, and project files. Special-status species that have been recorded in or adjacent to the project vicinity, but for which there are no observations and no appropriate habitat within the project are provided in Table 1, and no further discussion of these species is provided. An expanded discussion is provided for sensitive species for which potential habitat is present and that may be expected to occur in the project area or were detected within the project limits during field surveys.

Table 1: Sensitive Species Considered as Part of Environmental Review

Scientific Name	Common Name	Status	Habitat	Potential for Project Impacts
	Migratory Bird Species (Nesting)	FSC, CSC	Various tree nesting	None, vegetation removal during non-nesting season
	Bat Species	FSC, CSC	Various tree roosting	Low, vegetation removal during winter migratory period for some bat species (tree roosting species)
	Fish Species		Aquatic	None, no aquatic habitat
<i>Agelaius tricolor</i>	Tricolor Blackbird	FSC, CSC	Breeding sites require open accessible water, a protected nesting substrate	Low; nesting habitat for this species is not available on project site
<i>Ambystoma californiense</i>	California Tiger Salamander	FT	Breeds in vernal pools, seasonal wetlands	None, seasonal wetlands not present in project area
<i>Astragalus tener tener</i>	Alkalai Milk Vetch	FSC	Alkaline vernal pools, Central valley grasslands	None, seasonal wetlands not present in project area
<i>Atriplex depressa</i>	Brittlescale	FSC	Alkaline clay vernal pools, meadows and seeps, chenopod scrub, Central Valley	None, seasonal wetlands not present in project area
<i>Branchinecta lynchii</i>	Vernal Pool Fairy Shrimp	FT	Vernal pools, seasonal wetlands	None, seasonal wetlands not present in project area
<i>Buteo swainsonii</i>	Swainson's Hawk	CT	Summer migrant. Open grasslands with scattered large trees for nesting.	Moderate, Species observed foraging adjacent to project area.
<i>Clemmys marmorata</i>	Western Pond Turtle	FSC	Aquatic habitat with vegetative cover, and soils appropriate for egg laying	None. No aquatic habitat available in project area.
<i>Desmocerus californicus dimorphus</i>	Valley Elderberry Longhorn Beetle	FT	Restricted to elderberry bushes in central valley and	Low, VELB host elderberry bushes not detected within

			adjacent foothills to 3,000' elevation	250 feet of project site
<i>Haliaeetus leucocephala</i>	Bald eagle	FT	Breeds in coniferous forests near water	None, suitable nesting and foraging habitat not available in project area
<i>Lepidurus packardii</i>	Vernal Pool Tadpole Shrimp	FE	Vernal pools, seasonal wetlands	None, seasonal wetlands not present in project area
<i>Perognathus inornatus</i>	San Joaquin Pocket Mouse	FSC	Dry, open grasslands or scrub areas on fine-textured or sandy soils between 350 and 600 m (1100 and 2000 ft) in the Central and Salinas valleys	None, project area above below expected lowest elevation (1,100 ft). Scrub and grassland habitat not available on project area.
<i>Rana aurora draytoni</i>	California Red Legged Frog	FT	Breeds in semi permanent or permanent aquatic habitat with vegetative cover	None. No aquatic habitat available in project area. Considered extirpated from Central Valley
<i>Riaria riparia</i>	Bank Swallow	CT	Requires vertical banks with fine textured soils near streams for nesting	Low; nesting habitat for this species is not available on project site
<i>Spea hammondi</i>	Spadefoot Toad	FSC	Breeds in vernal pools, seasonal wetlands	None, seasonal wetlands not present in project area
<i>Thamnophis gigas</i>	Giant Garter Snake	FT, CT	Breeds in semi permanent or permanent aquatic habitat with vegetative cover	None. No aquatic habitat available in project area.

CE: CA Endangered **CT:** CA Threatened **CR:** CA rare; Not presently threatened with extinction, it is in such small numbers that it may become endangered if its present environment worsens. **CSC:** California Special Concern: Plants protected under native Plant protection Act (NPPA), California Environmental quality Act (CEQA), or the Natural Communities Conservation Planning Act (NCCPA) **FE:** Federal Endangered **FT:** Federal Threatened **FPE:** Federal Proposed Endangered **FPT:** Federal Proposed threatened **FSC:** Federal Species of Concern- Species for which the USFWS has sufficient information to propose them as threatened or endangered under the Endangered Species Act. **CNPS List 1B:** California Native Plant Society list of plants rare, threatened or endangered in California **CNPS List 2:** California native Plant Society list of plants rare, threatened or endangered in California, but more common elsewhere. **CNPS List 3:** California native Plant Society list of plants about which there is a need for more information- a review list. **CNPS List 4:** California native Plant Society list of plants of limited distribution- a watch list.

Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend.

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

Biological assessments are required under Section 7(c) of FESA if listed species or critical habitat may be present in the area affected by any major construction activity conducted by, or subject to issuance of a permit from, a federal agency as defined in Part 404.02. Under Section 7(a)(3) of FESA every federal agency is required to consult with the United States Fish and Wildlife Service or National Marine Fisheries Service on a proposed action if the agency determines that its proposed action may affect an endangered or threatened species. The following summarizes Caltrans’ determinations for federally listed, proposed listed, or candidate species that according to USFWS lists, may occur within the project vicinity (Madison and Woodland USGS 7.5-minute quadrangles).

- 1) Due to the project area being outside the range of the species, the lack of suitable habitat or habitat components in the project area, the lack of detection during recent Caltrans surveys or because the project is minor in scope and would not harm individuals or alter the species’ habitat, it is my determination that the proposed project will have “**no effect**” on the following Federally listed threatened or endangered, candidate, or proposed species or their critical habitat:

Valley Elderberry Longhorn Beetle (FT)

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). If impacts to active nests or individual birds are expected, Caltrans shall consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918. However, no impacts to MBTA birds are expected due to avoidance of vegetation removal during nesting season.

Swainson's Hawk

Species Account

Swainson's hawks require large, open grasslands with abundant prey in association with suitable nest trees. The diet of the Swainson's hawk is varied with the California vole being the staple in the Central Valley. A variety of bird and insect species are also taken. Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Unsuitable foraging habitat includes crops such as vineyards, orchards, certain row crops, rice, corn and cotton crops. Under natural conditions, Swainson's Hawks likely foraged in upland and seasonally flooded perennial grasslands. These habitats are largely extirpated from the Central Valley today, replaced by annual grasslands with low prey populations, and agricultural crops. These changes have resulted in Swainson's hawks being dependent on landscape elements almost entirely controlled by human activities, with frequent shifts in agricultural practices and habitat quality.

Over 85 percent of Swainson's hawk territories in the Central Valley are in riparian systems adjacent to suitable foraging habitats. Swainson's hawks often nest peripherally to riparian systems of the valley as well as utilizing lone trees or groves of trees in agricultural fields and mature roadside trees. Valley oak, Fremont cottonwood, walnut, and large willow with an average height of about 58 feet, and ranging from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. This association with riparian habitat is most likely due to the lack of trees in intensively cultivated and industrially developed areas. Nesting Swainson's Hawks are somewhat tolerant of human activity, particularly in areas where activity is regular and individual pairs are able to habituate to it. Nest sites are sometimes located near roads and houses, and frequently near field edges where crop cultivation activities regularly occur. However, changes in activity regime (construction in previously open areas, human intrusion at nest site) frequently causes nest abandonment, particularly during the pre-nesting, egg-laying, and incubation stages of the reproductive cycle.

Within California, Swainson's hawks begin nesting in late March and the young usually leave the nest (fledge) by July. Two to four eggs are laid at 2-day intervals and incubation lasts between 25 and 36 days. Incubation is performed primarily by the female; however, the male will cover the eggs when the female leaves the nest to forage. The young will leave the nest between 33 and 37 days after hatching and begin to kill insects and snakes on their own.

The Swainson's Hawk Technical Committee's "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (2000) consider the following as "typical" timing of migration, courtship, and nesting activities for Swainson's hawks from San Joaquin to Northern Yolo County:

Mar. 20 – Apr. 5: Return from migration and begin occupying traditional nest territories. Territorial and courtship displays.

Apr. 6 to Apr. 20: Activity at nest site increases. Nest building, territorial and courtship displays, copulation.

Apr. 21 to Jun. 10: Brooding, laying, incubation, newly hatched chicks.

Jun. 10 to Jul. 30: Young are active, tended by parents

Aug. 1st to Sep. 15th: Post fledging.

Swainson's hawks breeding in California may spend the winter in Mexico and South America. Central Valley birds appear to winter in Mexico and Columbia and hawks from northeastern California have been satellite-transmitter tracked to Argentina. Migration of Swainson's hawks' south begins in August and lasts through October. In the spring, they begin returning north to California in March. The populations that nest within the Central Valley arrive and depart earlier than those populations in northern California. The intensity of the summer heat in the Valley is thought to be the trigger for these earlier dates.

Swainson's hawks were once found throughout lowland California and were absent only from the Sierra Nevada, north Coast Ranges and Klamath Mountains, and portions of the desert regions of the State. Today, Swainson's hawks are restricted to portions of the Central Valley and Great Basin regions where suitable nesting and foraging habitat is still available. Central Valley populations are centered in Sacramento, San Joaquin, and Yolo counties. During historical times (ca. 1900), Swainson's hawks may have maintained a population in excess of 17,000 pairs. In a study conducted in 1994, the statewide population was estimated to be approximately 800 pairs. Surveys in 1998 and 1999 in the Owens Valley area of the State revealed a larger population (about 20 pairs) than previously documented, centered around alfalfa fields in the area.

The loss of agricultural lands to various residential and commercial developments is a serious threat to Swainson's hawks throughout California. Additional threats are habitat loss due to riverbank protection projects, conversion from agricultural crops that provide abundant foraging opportunities to crops such as vineyards and orchards which provide fewer foraging opportunities, shooting, pesticide poisoning of prey

animals and hawks on wintering grounds, competition from other raptors, and human disturbance at nest sites. Although it is not an evident threat within California, pesticides and insecticides are a severe threat to the wintering birds in Argentina, killing over 10,000 birds in 1995 alone.

Presence on Project Site

Three (3) Swainson's Hawks were observed foraging in the agricultural fields adjacent to YOL-16 and County Road #93 by Caltrans Biologist Jason Meigs during a 13, July 2004 site visit. Trees alongside SR-16 within the immediate project area were inspected for nests during this visit and none were detected. None of the hawks observed on the 13, July 2004 visit were observed making use of any of the trees visible from the SR-16 and County Road #93 intersection, and continued to forage over the adjacent agriculture fields until they were out of sight.

The California Natural Diversity Database (CNDDDB, 2003) has recorded the following occurrences of nesting Swainson's Hawks near the proposed project area:

- South side of Hwy 16, 1 mile west of Road 93 (2001)
- North Side of Highway 16, 0.2-miles east of Road 93, 10 m north of SR-16 (2001)
- North side of SR-16 1.6 miles west of Road 93 (2000)

A field survey was conducted on 22, October 2004 to search for un-occupied hawk nests within 0.25-mile of the project area. Within this search area, the nest structure at the occurrence listed above as "North Side of Highway 16, 0.2-miles east of Road 93, 10 m north of SR-16 (2001)" was observed in a large Valley Oak located approximately 70 meters (230 feet) west of the west end of the proposed project area (Refer to Figures 4a & 4b).

Affected Environment

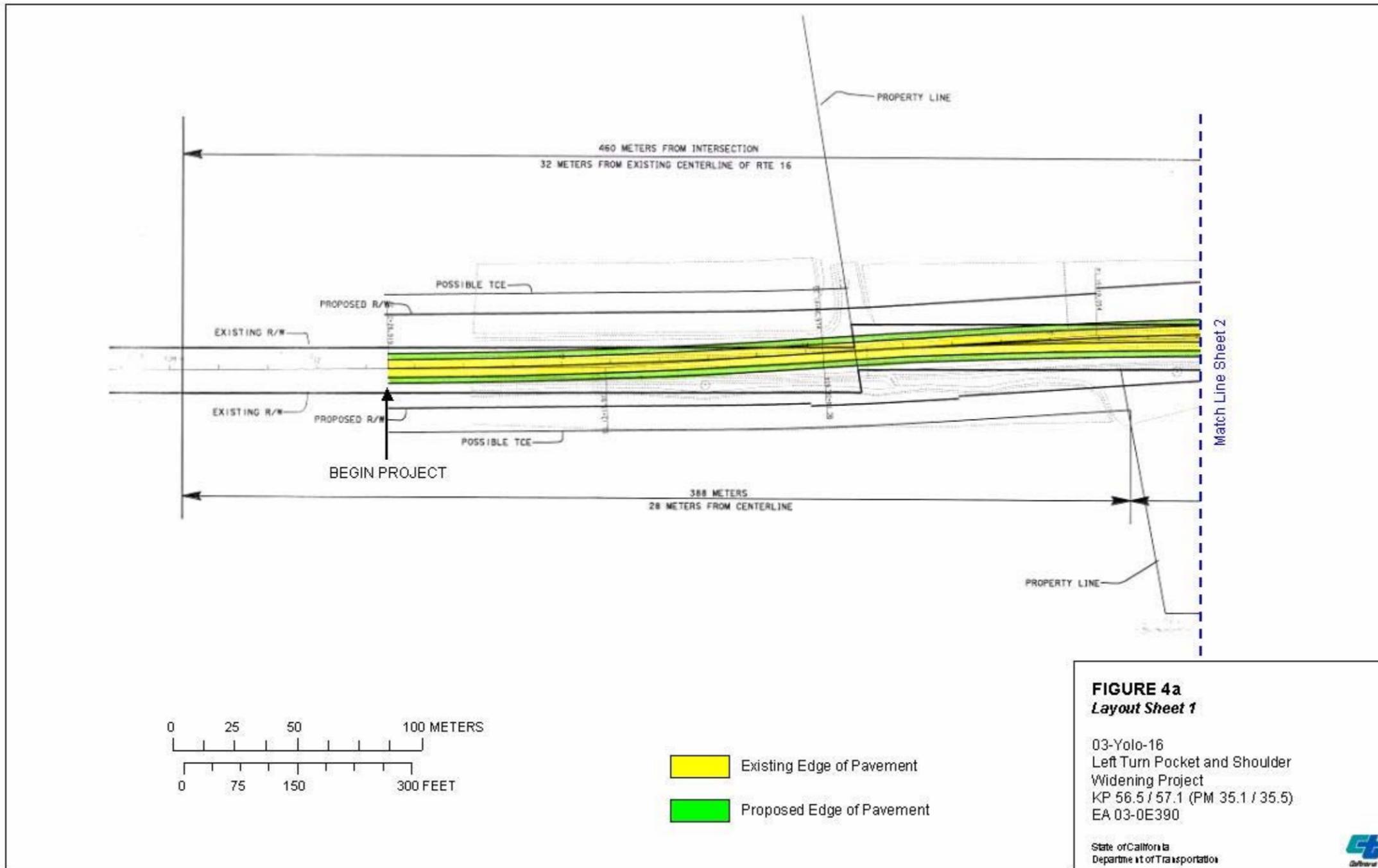
Presently, agricultural land adjacent to SR-16 in the project vicinity is dominated by, row crops and pasture. Typically, these agricultural fields are monotypic but different crops are rotated throughout the year and include grain, alfalfa, corn, tomatoes, squash or others. Trees are sometimes planted or left behind as windbreaks at field edges, in the project area these trees include Blue Gum Eucalyptus (*Eucalyptus globulus*), Polynesian Ironwood (*Casaurina equisetifolia*), shore pine (*Pinus contorta*), oleander (*Nerium oleander*), California Walnut (*Juglans californica*), almond (*Prunus*, sp.), and Valley Oak (*Quercus lobata*). Some ruderal (weedy) vegetation can be found along roadsides, at field edges, and between rows including Bermuda grass (*Cynodon dactylon*), milk thistle (*Silybum marianum*), Russian Thistle (*Salsola kalii*), and cheeseweeds (*Malva*, sp.). Because of their high degree of disturbance, agricultural areas generally have a low habitat value for wildlife, although a number of species adapted for disturbed conditions can be found.

Impacts

Direct Impacts

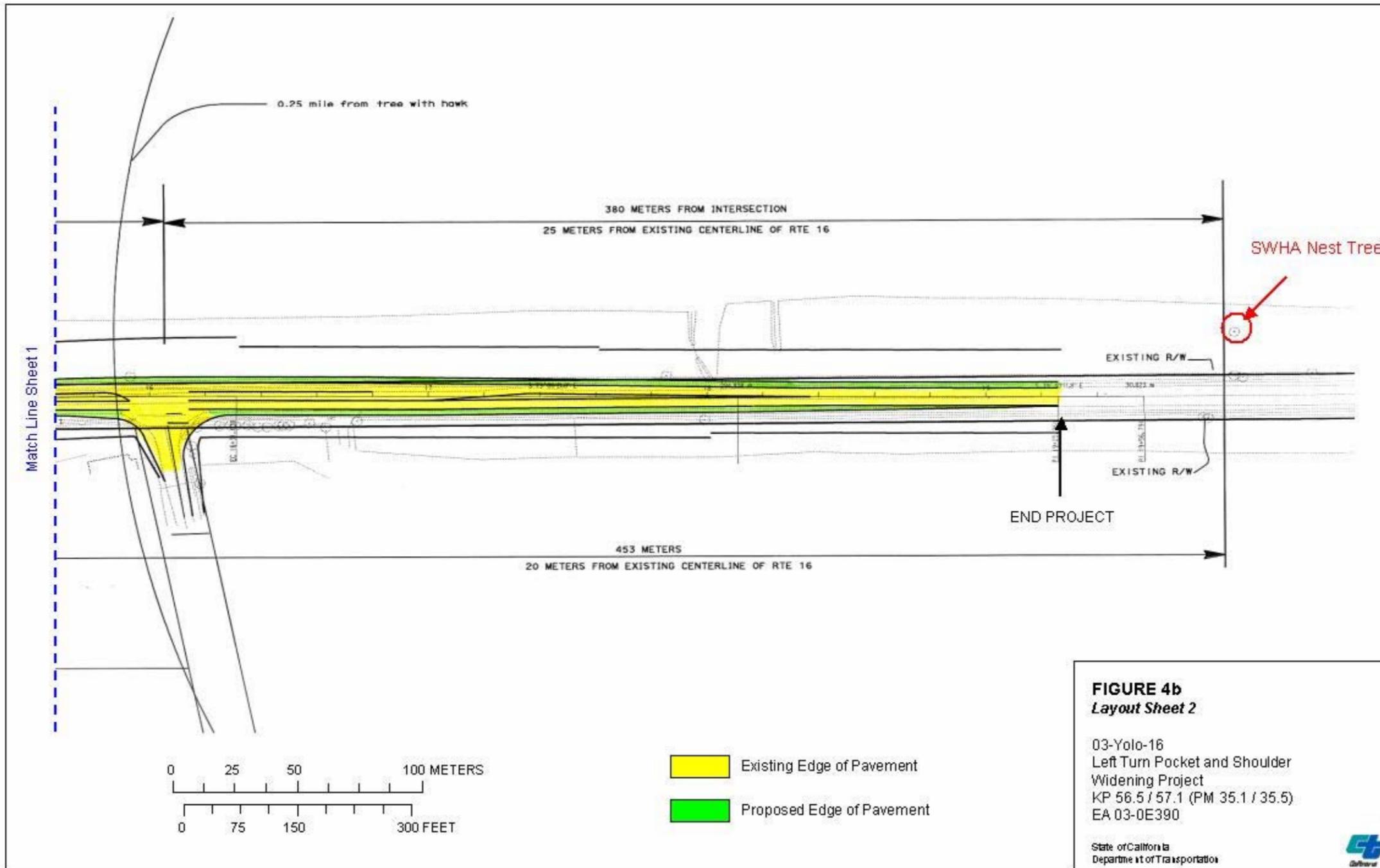
Removal of woody vegetation (trees and shrubs) during the course of the left turn pocket and shoulder widening is unavoidable. Project construction will require the removal of a mature California black walnut tree (*Juglans californica hindsii*), a mature valley oak tree (*Quercus lobata*), and a single almond tree (*Prunus*) adjacent to the agricultural fields on the north side of SR-16. Construction will also require the removal of several trees landscaping the residence adjacent to the south side of SR-16 at the County Road #93 intersection. A 70-meter (230 feet) long strip of Polynesian Ironwood (*Casaurina equisetifolia*) trees and a single immature valley oak (*Quercus lobata*) tree will require removal from the southeast corner of the intersection. Additionally, a 60-meter (195 feet) long strip of oleander (*Nerium oleander*) and shore pine (*Pinus contorta*) will be removed from the southwest corner of the intersection.

Figure 4a-Layout Sheet 1



April 2005

Figure 4b-Layout Sheet 2



April 2005

A large mature black walnut that will be removed approximately 200 meters (650 feet) west of the nest tree mentioned above, tree removal during the course of left turn pocket installation and shoulder widening is unavoidable. The nest structure at the occurrence listed above as “North Side of Highway 16, 0.2-miles east of Road 93, 10 m north of SR-16 (2001)” is located outside of the proposed project area and will not be removed as a result of this project.

As a result of highway widening for the installation of the proposed left turn pocket and additional shoulder area at SR-16 and County Road #93, approximately 1.27 acres of adjacent cropland suitable for foraging Swainson’s Hawks will be directly impacted within the limits of roadway grading, fill, and pavement.

Indirect Impacts

Potential foraging habitat for the Swainson’s hawk will be marginalized a result of the purchase of new right of way, right of way fence relocation, utility relocation, and ditch relocation. Although these areas are not expected to result in the direct take of foraging habitat by grading, fill, or pavement, these areas are more likely to become occupied by weedy or ruderal vegetation, are more likely to become less suitable for sustaining populations of prey items, and are also more likely to become less attractive foraging areas for the Swainson’s hawk due to their proximity to the highway. In addition to the direct take of foraging habitat, the proposed project will result in the marginalization of an additional 2.9 acres of foraging habitat adjacent to SR 16.

Cumulative Effects

According to the State CEQA Guidelines, cumulative impacts refers to two or more individual effects, which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

This section evaluates cumulative effects associated with the proposed project to the Swainson’s Hawk. The study area analyzed in this evaluation is the Highway 16 corridor east of Esparto and West of Woodland In Yolo County (Segments 5 and 6, below). This area was selected for analysis because it is cumulative development in this area that has the potential to affect local populations of Swainson’s Hawk, and would be supported by the proposed action.

Caltrans Draft Transportation Concept Report (TCR) for Highway 16 (2003) was reviewed to determine long term plans for Highway 16 within the cumulative impact analysis area. A TCR is a long-term planning document that each Caltrans District

prepares for every State highway, or portion thereof, in its jurisdiction, and is where long-range corridor planning in Caltrans usually begins. The purpose of a TCR is to determine how a highway will be developed and managed over a twenty-year period so that it delivers the targeted level of service and quality of operations that define the Route Concept. The Highway 16 TCR identifies 6 segments along highway 16 in Colusa and Yolo Counties. Segments 5 and 6 (described below) were determined to be within the cumulative impact analysis area.

Segment 5 (PM28.27-32.36) is a 2-lane conventional highway from County road 21A to the I-505 Northbound off ramp. Land use on this segment is primarily agriculture with residential housing. This segment passes through the community of Madison, which has a migrant camp adjacent to SR 16 at PM 31.34.

Segment 6 is a 2-lane conventional highway from the SR 16/I-505 junction to the SR16/I-5 junction. This segment is a major truck route for connecting I-505, Woodland, and I-5. (PM 32.3-43.4). The existing land use in this segment is primarily agriculture with low-residential housing. The current proposed project is located within segment 6.

Within the cumulative impact analysis area., Caltrans is currently developing a Safety Improvement Project on Highway 16 in Yolo County, between the town of Brooks and Interstate 505 (in segment 5, PM 19.0-32.36). A safety evaluation was performed on this segment of Highway 16 in 2001, resulting in the initiation of this project. This project is being developed to reduce the number and severity of accidents on Highway 16, by minimizing the impacts of driver error between the community of Brooks and I-505 (PM 19.0- 32.36). The project proposes to widen the shoulders to 8-foot with rumble strips, and create a clear recovery zone on both sides of the highway. These proposal measures are not included within the communities of Capay and Esparto. The project is designed to reduce road runoffs and rear end collisions. Additional improvements within the postmile limits of this project include left-turn pockets and right-turn pockets at some public roads, curve improvements at several locations, and measures to improve sight distance. A biological study for this project is currently being conducted by Caltrans. As of the date of this document, this project is not expected to result in direct impacts to any SWHA nesting sites, but may result work within the buffer zone of SWHA nest sites, and may also result in the loss of up to 52.81 acres of SWHA foraging habitat. The construction date is scheduled for calendar year 2007.

Caltrans is also working with Yolo County to develop Traffic Calming Projects within the towns of Capay & Esparto, to reduce the speed of traffic traveling through the communities and to develop visual cues that communicate to drivers that they are entering a community. In the last few years, Caltrans has installed over 30 signs and 3 additional flashing beacons to improve transportation safety These included the following projects that were listed on the California State Clearinghouse (SCH) website between October 2000 and November 2004:

- “Yolo 16 Roadway Improvement at County Road 85B” (NOE – SCH# 2004118403; 11/29/2004)
- “Safety Project in Various Counties to Install Metal Beam Median Guardrail” (NOE - SCH# 2004118404; 11/29/2004)
- “Traffic Calming Project Capay and Esparto” (NOE – SCH# 2004068441; 6/28/2004)
- “State Route 16 Superelevation and Guardrail Project “ (NOD – SCH# 2003032072 ; 6/30/2003)
- “State Route 16 Sight Distance Improvement at County Road 85B” (NOE – SCH# 2002038204; 3/6/2002)
- State Route 16 Flashing Beacon Installation at County Road 89” (NOE – SCH# 2002018291; 1/15/2002)

The construction of these safety features did not directly impact any SWHA nesting sites or foraging habitat, and therefore did not contribute to cumulative effects to the SWHA within the cumulative impact analysis area.

Several other Highway 16 improvements are being developed, but are only in the initial planning stages at the date of this document, and potential impacts to SWHA within the cumulative impact analysis area have not been determined at this time. These proposed improvements are minor in scope, are expected to experience impacts to SWHA similar to those of the currently proposed project, and are expected to make only minor contributions to cumulative effects to SWHA populations within cumulative impact analysis area. These projects will be designed to improve safety by raising driver awareness, reducing the incidence run-off the road accidents, and improving motorists' sight distance to see other vehicles.

The Cache Creek Indian Bingo & Casino complex, located approximately 15 miles west of the proposed project area near the town of Brooks is owned by the Rumsey Rancheria Band of Yocha-De-He Wintun Indian Tribe. The tribe has plans to expand their facilities. The Cache Creek Casino complex has been and will continue to be a major traffic generator in the Capay Valley and on highway 16 in Yolo County and within the proposed project area. Caltrans is working with the tribe to examine possible operational improvements from the Casino (PM 19.50) to the SR 16/ I-505 junction (PM 32.36).

The Yolo Board of Supervisors approved the proposed Wildwings subdivision, a community of 1,000 people located 5 miles west of Woodland and about 3 miles east of Madison (this subdivision is located approximately 0.42 mile west of the proposed project area, and 0.33 mile west of the recorded nest tree). The community will consist of 337 homes, golf course, open space preserve, fire station, bike lanes, and a Yolobus stop adjacent to SR 16. A portion of this community will have housing lots with onsite aircraft hangers for access to the Watts-Woodland airport. Except for minor repairs and construction (fencing, erosion control, installation of the bus shelter, sidewalk and gutter repair, etc.), the developer has recently completed the improvements for the Wild Wings project. These include the roads, sidewalks,

lighting, utilities, storm water drainage, community recreation, sewer system, water system, public open space parcel, runway access, and landscaping. This will be the biggest development in the unincorporated area of Yolo County for the foreseeable future. This development was determined by Yolo County to be in conformance with the goals and policies of the Yolo County General Plan. It is assumed that the construction of this development resulted in impacts to Swainson's hawk foraging habitat, nesting areas, or both. At the date of this document no CEQA documentation has been made available to Caltrans regarding the impacts of constructing the Wildwings development to the Swainson's hawk, and its contribution to cumulative effects to the Swainson's hawk within the cumulative impact study area are unknown.

Avoidance, Minimization and/or Mitigation Measures

Under CDFG's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (*Buteo swainsoni*) in the Central Valley of California (1994)" impacts to nesting Swainson's Hawks must be avoided. CDFG requires a no disturbance zone of 0.25-mile around an active nest site. Also, losses of suitable foraging habitats within 10 miles of a Swainson's Hawk nest site must be mitigated by protection or creation of equally suitable foraging habitat elsewhere within the territory's 10-mile radius. The ratio of loss/replaced habitat changes from 1:1 within 1 mile of a nest, 1:0.75 between 1 and five miles from the nest to 1:0.5 over 5 miles from the nest.

The following avoidance, minimization and compensation measures shall be implemented to reduce both direct and indirect impacts to the Swainson's Hawk:

01-Purchase of Swainson's Hawk Foraging Habitat Credits from CDFG-Approved Conservation Program:

Caltrans shall purchase Swainson's Hawk Foraging Habitat Mitigation Credits from the Yolo County Joint Powers Association (JPA). As indicated in the "Agreement Regarding Mitigation for Impacts to Swainson's hawk Foraging Habitat in Yolo County", entered into between the JPA and the CDFG, the Swainson's hawk Mitigation Fee (Fee) is to be reviewed by the JPA on an annual basis. The current fee, established in 2001, is \$2,509.00 per acre. Based upon the draft findings, the JPA is considering increasing the fee to \$5,800.00 per acre. This new Fee includes proportional amounts for easement acquisition, transactions, monitoring endowment, legal endowment, contingencies, and administration. Public input and comments on the Swainson's Hawk fee update are currently being accepted by the JPA.

A one-acre credit shall be purchased for every acre of SWHA foraging habitat that will be impacted by the proposed project (1.27 acres direct impact + 2.90 acres indirect impact = 4.17 credits x \$5,800 = \$24,186).

02-Restrict Timing of Woody Vegetation Removal:

The removal of woody vegetation (trees and shrubs) required for the project shall be completed between September 15th and February 28th prior to project construction. This time period is considered to be outside of the predicted nesting season for raptors and migratory birds.

03-Pre-Construction Surveys and Construction Monitoring for Swainson's Hawk:

Pre construction surveys will be performed by a qualified biologist according to CDFG guidelines to determine if Swainson's hawks are nesting within 0.25 mile of the proposed project area. Caltrans will consult with CDFG regarding the need for further action if no Swainson's hawks are recorded nesting within 0.25 mile of the proposed project site during the said construction season.

During construction, a qualified avian biologist will be present daily, on site, monitoring the behavior of any Swainson's hawks nesting within 0.25-mile of the proposed project area. All construction activities shall stop if the birds exhibit erratic behavior and construction shall not resume until the avian biologist confirms that the bird's behavior has normalized.

04- Construction Personnel Environmental Awareness Training:

A complete environmental awareness training shall given to all construction personnel. Construction personell shall be informed of the presence of Swainson's hawks and habitat associated with the species, and that unlawful take of the animal is a violation of the California Erndangered Species Act. Prior to construction activities, a qualified biologist shall instruct all construction personell about 1) the life history of the Swainson's hawk, 2) the importance of agricultural fields and suitable nesting areas to the Swainson's hawk, and 3) the terms and conditions of the Incidental Take Statement.

05 - Construction Conducted During the "Post Fledging" Period of the Swainson's Hawk:

In order to avoid potential impacts affecting the reproductive success Swainson's hawks, all project construction activities shall begin on or about August 1st (considered the beginning of the typical "post-fledging" period of the Swainson's hawk) of the given construction season.

06-Restrict Contractor Staging and Stockpile Areas:

In order to insure that project related activities do not further encroach into the recommended 0.25-mile radius nest tree buffer zone, no contractor materials, equipment, or personnel may not be staged or stockpiled outside of the defined limits of the proposed project area (SR-16, from post mile 35.2 to 35.6, within the proposed right of way). No project construction activities are proposed within 60 yards of the currently recorded nest tree.

07-CDFG Incidental Take Permit:

The project will require an Incidental Take Permit (ITP) for potential impacts to the Swainson's Hawk, a State-Listed Threatened species pursuant to Section 2081 (b) and (c) of the California Endangered Species Act. Any additional measures included in the ITP will be incorporated into this project.

Mitigation Monitoring and Funding

All of the avoidance, minimization, and compensation measures listed above shall be implemented before or concurrent with the construction of the proposed project and therefore, post-construction or long-term monitoring for the success of these measures will not be required. The cost of potential mitigation measures including the cost of providing personnel for training contractors and conducting pre-and during-construction surveys have already been identified and programmed by Caltrans Project Management into the total project cost.

2.5 Construction Impacts

- During construction, care must be taken to maintain in place as many of the existing trees and shrubs of the residence to the west of the intersection. Should the owner request; Caltrans is to provide replacement plants to be placed on the owner's property.
- If requested by the homeowner, Caltrans should provide a replacement-planting screen for the property to the east of the intersection. All replacement plants should be placed on private property and maintained by the homeowners.
- The project will take approximately 45 working days (approximately 60 calendar days) to construct the proposed project. Because of regulation constraints of the Central Valley Regional Water Quality Control Board, the end of the "construction season" and date when "over-winter" Best Management Practice (BMP) measures must be in place on falls on October 15th.
- The Caltrans PDT anticipates that project construction activities must begin by no later than August 1st of the construction season to accomplish all project work in one season.
- The project is proposed for construction during the 2006 construction season, beginning on or around August 1st.
- Construction noise and dust would impact the residents of the two homes located to the east and west of County Road 93, particularly the home to the west that is already fairly close to SR16. The implementation of Caltrans Standard Specifications would reduce noise and dust impacts.
- Construction noise is regulated by Caltrans standard specification Section 7-1.01I, "Sound Control Requirements." These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturer's specifications.

- Removal of woody vegetation (trees and shrubs) during the course of the left turn pocket and shoulder widening is unavoidable. Project construction will require the removal of a mature California black walnut tree (*Juglans californica*), a mature valley oak tree (*Quercus lobata*), and a single almond tree (*Prunus*) adjacent to the agricultural fields on the north side of SR-16. Construction will also require the removal of several trees landscaping the residence adjacent to the south side of SR-16 at the County Road #93 intersection. A 70-meter (230 feet) long strip of Polynesian Ironwood (*Casaurina equisetifolia*) trees and a single immature valley oak (*Quercus lobata*) tree will require removal from the southeast corner of the intersection. Additionally, and a 60-meter (195 feet) long strip of oleander (*Nerium oleander*) and shore pine (*Pinus contorta*) will be removed from the southwest corner of the intersection. Impacts to vegetation will not differ using either Alternative 1 (widen for turn lane to the north) or Alternative 2 (widen for turn lane on both sides).
- Project construction would have minimal impacts on agricultural activities in this area. A total of 1.15 acres of Unique Farmland, which is also under Williamson Act contracts, would be utilized for construction staging activities. Temporary construction easements (TCE) would be obtained from property owners to compensate them for the temporary loss of their land.
- Although construction activities are proposed within 0.25-mile of a known Swainson's Hawk nest, no project construction activities (including staging and stockpile areas and construction personnel) are proposed within 60 yards of the known nest.
- Project construction activities will be conducted beginning on or around August 1st of the construction season. Conducting the proposed project during what is considered the typical "post-fledging" period of the Swainson's Hawk (August 1st to September 15th) greatly reduces the potential for the proposed project to interfere with normal breeding behavior or activities or to interfere with the reproductive success of the Swainson's Hawk.
- The removal of yellow traffic stripe material shall be disposed of at a Class 1 disposal facility. Standard special provisions (REMOVE TRAFFIC STRIPE AND PAVEMENT MARKING) are to be used for the removal of the traffic stripe and pavement marking.

Chapter 3 Comments and Coordination

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

- A site visit was performed by Jason Meigs (Biologist) on September 29, 2004 with Dennis Corcoran, Caltrans Project Engineer.
- A field visit was conducted on October 22, 2004 by Jason Meigs (Biologist) to search for un-occupied hawk nests within 0.25-mile of the project area. Within this search area, the nest structure at the occurrence listed above as "North Side of Highway 16, 0.2-miles east of Road 93, 33 feet (10 meters) north of SR-16 (2001)" was observed in a large Valley Oak located approximately 70 meters (230 feet) west of the west end of the proposed project area.
- Field surveys of the project site were conducted to assess existing natural resources and potential impacts on July 13, 2004 and October 22, 2004 by District biologist Jason Meigs. Emphasis was placed on the special status species that may occur. The project site was field reviewed to 1) identify habitat types; 2) identify potential wetlands; 3) identify factors indicating the potential for rare species; 4) identify rare species present; and 6) identify potential problems for the study.
- The cultural resources review was performed by Caltrans Professionally Qualified Staff (PQS) archaeologist and architectural historian, and included an information center records search, a review of Caltrans District 3 and Headquarters in-house documentation, site visit in October 2004 during which an examination of the entire project area was conducted by Caltrans archaeologist and architectural historian, and review of project plans and aerial photographs. The area is of low sensitivity for archaeological resources. The area has been heavily disturbed by previous construction and farming. In addition, the entire project area has been previously surveyed and no cultural resources were identified. There is no potential to affect the historic era built environment.
- Government Code Section 5129 (b) requires an agency to notify the Director of the California Department of Conservation (CDC) and the local governing body responsible for the administration of the preserve of the Williamson Act contracted land proposed for acquisition for a public improvement project. The environmental documentation for this project will be sent with acreage estimates to the CDC and to the Yolo County Planning Department.
- Caltrans consulted the CDFG's 1994 "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California" and determined a work window constraint of "no intensive new disturbances or

project related activities which may cause abandonment or forced fledging should be initiated between March 1st through September 15th.

- In a December 6, 2004 e-mail correspondence, CDFG Biologist Jenny Marr detailed the constraints under which Caltrans could perform the proposed project without formal consultation with the CDFG. These measures included nest site monitoring and the adherence to conducting construction outside of the nesting season specified above should there be a Swainson's Hawk nest within 0.25-mile of the project area. Ms. Marr indicated that if Caltrans could not postpone the construction relative to these constraints, they could apply to the CDFG's Incidental Take Permitting program, which permits the project for the take of state-listed species incidental to otherwise approved projects under the California Environmental Quality Act (CEQA).

Chapter 4 List of Preparers

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

Rajive Chadha, B.A., University of Ottawa, 14 years Environmental Engineering experience. Contribution: Hazardous Waste Review of project.

Joan Fine, Associate Environmental Planner (Architectural History) and Principal Architectural Historian with Caltrans' Office of Environmental Management. B.A. Environmental Studies, University of California Santa Barbara (UCSB). M.A. History, California State University Sacramento (CSUS). 11 years experience in environmental analysis, eight years experience in cultural resource analysis. Contribution: Performed cultural studies review, in particular the history/architectural history review.

Marsha Freese, Associate Landscape Architect. Registered Landscape Architect #1704, B.S. in Landscape Architecture; Iowa State University, Masters of Business Administration, University of Phoenix; 12 years of City Planning, 12 years of Landscape Architectural experience, includes four years as a Planning/Landscape Architectural Consultant, three years in Caltrans Office of Landscape Architecture preparing Visual Impact Assessments, one year with Caltrans Office of Environmental Planning performing duties of Coordinator as an Associate Environmental Planner. Contribution: Prepared Visual Impact Assessment.

Lupe Jimenez, Associate Environmental Planner-Coordinator. B.A. Environmental Studies, Minor in Biological Sciences, California State University of Sacramento. Fourteen years in preparing environmental documents and Permits. Contribution: Coordinated the environmental technical studies and prepared the environmental document.

Aaron McKeon, Associate Environmental Planner-Community Impact Assessment Specialist, Masters in Regional Planning, Cornell University, Ithaca, New York. Five years of environmental planning experience. Contribution: Prepared community impact assessment memo.

Jason Meigs, Associate Environmental Planner-Natural Sciences. B.A. Environmental Studies, Minor in Biological Sciences, California State University of Sacramento. Seven years of biological studies and environmental planning experience. Contribution: Conducted biological studies of project area, wrote Natural Environment Study, and prepared application to California Department of Fish and Game for Incidental Take of Swainson's Hawk.

Robert Rosas Jr., Right of Way Agent. B.A. Government, California State University of Sacramento. Six years Right of Way Experience, 1 year Environmental Planning experience with District 3. Contribution: Prepared Right of Way Data Sheets/Estimate for the project.

Erick Wulf, Associate Environmental Planner, Archaeology. B.A. and M.A. Anthropology, California State University of Sacramento; 15 years experience in California Archaeology. Contribution: Wrote the Cultural Studies Report.

Hamid Hakim, NPDES Coordinator, Environmental, Ohio State University; 4 years experience preparing Water Quality Analysis. Contribution: Water Quality Analysis.

Jeremy Ketchum, Senior Environmental Planner, B.S. Environmental Policy Analysis and Planning, University of California at Davis; M.S. Transportation Management, California State University at San Jose, 6 years experience in Environmental Planning. Contribution: Environmental Senior

Appendix A CEQA 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”.

The California Environmental Quality Act requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A mark in the “no impact” column of the checklist reflects this determination. A list of the studies prepared to make these determinations is included as Appendix D.

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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

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?

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

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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

d) Expose sensitive receptors to substantial pollutant concentration?

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

e) Create objectionable odors affecting a substantial number of people?

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

BIOLOGICAL RESOURCES - Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

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

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?

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

COMMUNITY RESOURCES - Would the project:

a) Cause disruption of orderly planned development?

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

b) Be inconsistent with a Coastal Zone Management Plan?

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

c) Affect lifestyles or neighborhood character or stability?

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

d) Physically divide an established community?

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

e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?

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

f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?

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

g) Affect property values or the local tax base?

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

h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines)?

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

i) Result in alterations to waterborne, rail, or air traffic?

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

j) Support large commercial or residential development?

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

k) Affect wild or scenic rivers or natural landmarks?

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

l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?

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

CULTURAL RESOURCES - Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

d) Disturb any human remains, including those interred outside of formal cemeteries?

GEOLOGY AND SOILS - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

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.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

HAZARDS AND HAZARDOUS MATERIALS -

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- 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?
- 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?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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?

HYDROLOGY AND WATER QUALITY -

Would the project:

- a) Violate any water quality standards or waste discharge requirements?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

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

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

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

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

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

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

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

f) Otherwise substantially degrade water quality?

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

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

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

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

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

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

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

j) Inundation by seiche, tsunami, or mudflow?

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

LAND USE AND PLANNING - Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

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?

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?

NOISE - Would the project:

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?

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

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?

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?

POPULATION AND HOUSING - Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

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

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

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

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

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

PUBLIC SERVICES -

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

Fire protection?

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

Police protection?

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

Schools?

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

Parks?

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

Other public facilities?

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

RECREATION -

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

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

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

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

TRANSPORTATION/TRAFFIC - Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

a) Cause an increase in traffic which 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

UTILITY AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

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

g) Comply with federal, state, and local statutes and regulations related to solid waste?

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

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, or 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?

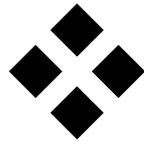
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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



Appendix B Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5267
FAX (916) 654-6608



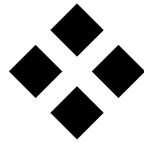
July 26, 2000

TITLE VI POLICY STATEMENT

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

A handwritten signature in black ink that reads "Jeff Morales".

JEFF MORALES
Director



Appendix C Minimization and/or Mitigation Summary

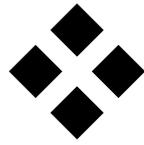
- If cultural materials (e.g., bones, stone implements, old bottles, etc.) are encountered during the project construction, Caltrans policy requires that all work in the area must immediately halt until a qualified archaeologist can evaluate the nature and significance of the material and determine an appropriate course of action in consultation with the State Historic Preservation Office (Caltrans Environmental Handbook, Volume 2). If human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the location, or any nearby area reasonably suspected to overlie adjacent remains, until the appropriate County Coroner has determined that the remains are not subject to provisions of Section 27491 of the Government Code. If the coroner determines the remains to be Native American, he shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will appoint a Most Likely Descendent for disposition of the remains (Health and Safety Code Sect. 7050.5, Public Resources Code Sect. 5097.24).
- In order to address National Pollutant Discharge Elimination System (NPDES) permit compliance, appropriate selection of both structural and non-structural control measures has to be considered to reduce, to the extent practicable, the discharge of pollutants from the construction and operation of this project. Adherence to the following is recommended to ensure compliance with the terms of the NPDES permit and to prevent receiving water pollution as a result of construction activities and/or operation of this section of SR 16.
- The project shall adhere to the conditions of the Caltrans Statewide NPDES Permit Order # 99-06-DWQ, # CAS000003, issued by the State Water Resources Control Board. Adherence to the compliance requirements of the NPDES General Permit Order # 99-08-DWQ, # CAS 000002, for General Construction Activities is also required.
- The project information does not indicate whether the amount of disturbed soil during the construction phase of the project would exceed 1 acre of land; if it does not, then, Standard Special Provision 07-340 shall be included in the PS&E to address water pollution control measures and a Water Pollution Control Program (WPCP) has to be prepared.
- If the amount of soil disturb does not exceed more than 1 acre of land during the construction phase, Standard Special Provision 07-340 shall be included in

the PS&E to address water pollution control measures and a Water Quality Control Program (WPCP) shall be prepared.

- Construction projects with a disturbed area of more than one acre are covered under the NPDES General Permit and require a Storm Water Pollution Prevention Plan (SWPPP) containing effective erosion and sediment control measures. These measures must address soil stabilization practices, sediment control practices, tracking control practices, and wind erosion control practices. In addition, the project plan must include non-storm water controls, waste management and material pollution controls. It is generally accepted that practices that perform well by themselves can be complemented by other practices to raise the collective level of erosion control effectiveness and sediment retention.
- Incorporation of permanent storm water runoff treatment measures, such as detention or infiltration basins, shall be considered to control pollutants resulting from normal use of the highway. Caltrans Headquarters recommends incorporation of treatment controls into projects whenever possible.
- Special care is required when handling and storing contaminated soil, including soil contaminated with aeri ally deposited lead (ADL). The quantity of soil, its level of contamination, where it will be stored, and when this activity will take place (winter/summer) are all water pollution concerns and should be described in detail in appropriate section of Special Provisions and should be addressed in the SWPPP. Section H.9 of the Caltrans Statewide NPDES Permit requires notification of the CVRWQCB if the project involves reuse of ADL contaminated soil, 30 days prior to advertisement for bids. This is to allow the RWQCB to determine any need for the development of Waste Discharge Requirements (WDR).
- During construction, care will be taken to maintain in place as many of the existing trees and shrubs of the residence to the west of the intersection. Should the owner request; Caltrans will provide replacement plants to be placed on the owner's property. Similarly, if requested by the homeowner, Caltrans should provide a replacement planting screen for the property to the east of the intersection. All replacement plants should be placed on private property and maintained by the homeowners.
- One light standard required for the project would be directed at the roadway to minimize light spillage or glare onto the adjacent residences.
- At the homeowner's request, Caltrans should provide replacement plants or compensate for the plants, which are removed, for the two homes on the west and east side of the intersection. There are approximately ten plants, which need to be removed at each location. All plant materials shall be planted on

private property away from sight distance areas and maintained by the homeowners.

- Erosion control measures for all disturbed areas will be provided.



Appendix D List of Technical Studies that are Bound Separately

Air Quality Report
Cultural Resources Report
Community Impact Assessment
Noise Study Report
Water Quality Report
Natural Environment Study
Location Hydraulic Study
Hazardous Waste Report
Scenic Resource Evaluation/Visual Assessment

Refer to Chapter 4 for a list staff that prepared the above technical reports.