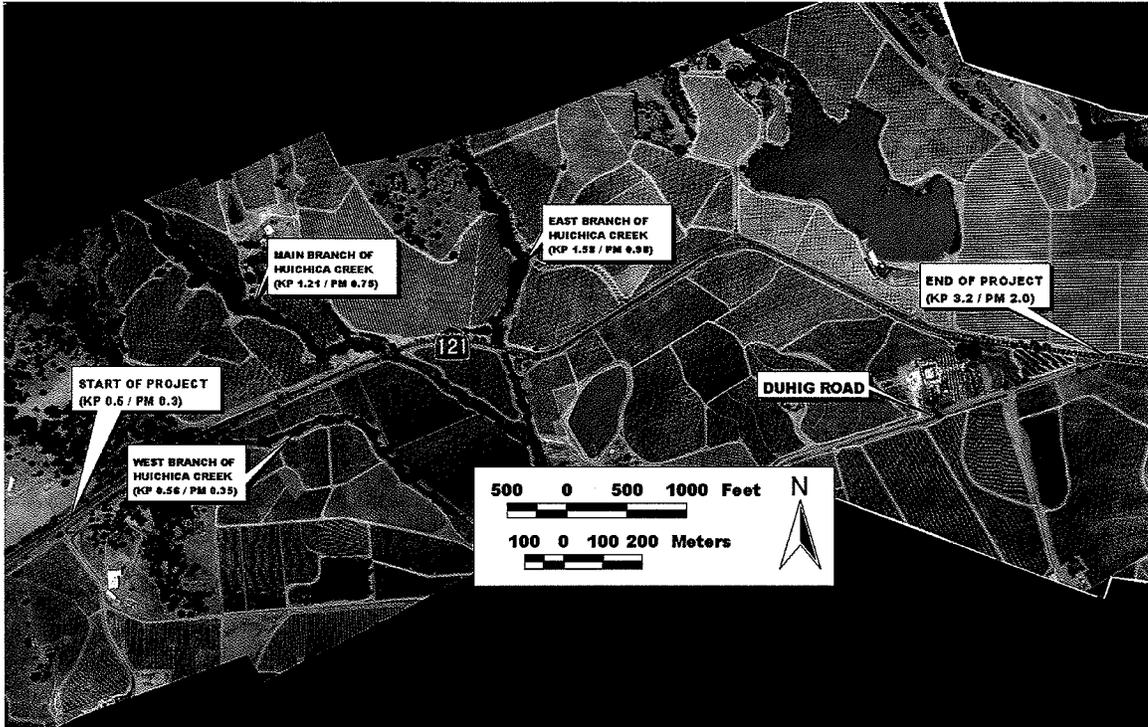


Duhig Roadway Rehabilitation and Curve Realignment Project



Initial Study (CEQA)

With Proposed Mitigated Negative Declaration

Prepared by the

State of California Department of Transportation

District 04-Napa County-Route 121

KP 0.5/3.2 (PM 0.3/2.0)

EA 444200

March 2005



SCH#
04-NAP-121
KP 0.5/3.2
(PM 0.3/2.0)
EA: 444200

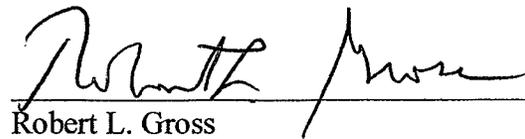
Duhig Roadway Rehabilitation and Curve Realignment Project,
State Route 121, KP 0.5/3.2 (PM 0.3/2.0), Napa County, California

INITIAL STUDY
With Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

March 30, 2005
Date of Approval


Robert L. Gross
District Office Chief
District 04 Office of Environmental Analysis
California Department of Transportation

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Mitigated Negative Declaration, which examines the potential environmental impacts of the proposed alternative for the project located in Napa County, California. The document describes why the project is being proposed, the existing environment that would be affected by the project, the potential impacts to the environment, and the proposed avoidance, minimization and/or mitigation measures.

What you should do:

Please read this Initial Study. Additional copies of this document and the technical studies are available for review at the district office, 111 Grand Avenue, Oakland, California 94612, as well as, the following two public sites in Napa.

Napa County Main Library
580 Coombs Street
Napa, CA 94559

Napa County Dept. of Conservation
Development & Planning Office
1195 Third Street, Suite 270

- This document is also available at www.dot.ca.gov/dist4/envdocs.htm
- We welcome your comments. If you have any comments regarding the proposed project, please send your written comments to Caltrans by the deadline of May 31, 2005.
- Submit comments via postal mail to:
Melanie Brent, Branch Chief
Department of Transportation, Office of Environmental Analysis
P.O. Box 23660
Oakland, CA 94623

Submit comments via e-mail to melanie.brent@dot.ca.gov
Submit comments by the deadline: May 31, 2005

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies or (3) abandon the project. If the project were given environmental approval and funding were appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made 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: Melanie Brent, Office of Environmental Analysis, P.O. Box 26330 Mail Station 8B, Oakland, CA 94623: (510) 286-5231 Voice, or use the California Relay Service TTY number, (800) 735-2929.

SHC#
04-NAPA-121
KP 0.5/3.2
(PM 0.3/2.0)
EA 444200

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to Rehabilitate and realign the roadway on State Route 121 in Napa from KP .05/3.20 (PM 0.03/2.00). Caltrans intends to achieve this by widening the shoulders to the standard width of 2.4 m (8 ft). In addition, the existing two horizontal curves at KP 1.71 (PM 1.06) and KP 2.28 (PM 1.42) will be re-aligned in accordance with design standards for a speed zone of 88 kilometers per hour (55 miles per hour). Also, drainage improvements include extending culverts, constructing a new culvert and raising the profile of the roadway where necessary. The intersection of Duhig Road and SR 121 will be improved to a 90 degree angle.

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that the Caltrans' decision regarding the project is final. This Mitigated Negative Declaration is subject to modification based on comments received by interested agencies to the public.

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

The proposed project would have no effect on land use, growth, air quality, noise or community impacts;

The proposed project would have no significant effect on farmland, hydrology and floodplains, water quality and storm water runoff, utilities, traffic and transportation, and hazardous waste.

The proposed project would have no significant adverse effect on biological resources, visual resources or cultural resources because the following mitigation measures would reduce potential effects to beneath the level of significance:

- Creek restoration to mitigate loss of critical habitat for threatened and endangered species;
- Tree mitigation to ensure that the visual character of the highway corridor would remain unchanged and the visual quality would remain high;
- Create a Data Recovery Plan to ensure the recovery of significant information from prehistoric and historical deposits, if found.

Susan Chang
Deputy District Director
Division of Environmental Planning and Engineering
California Department of Transportation – District 04

Date

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Chapter 1-Proposed Project

1.1. Introduction

Napa State Route 121 begins at the county line with Sonoma County, and this rural highway serves as an important arterial to both Napa and Sonoma counties. These counties are recognized as the country's premier winemaking area, which attracts tourists during the spring and summer months. Within the limits of the project, this segment of Napa 121 is a two lane rural highway with 3.6 meter (12 foot) lanes and 0.3 to 1.2 meter (1 to 4 foot) shoulders through a rolling terrain.

Route 121 is a primary interregional arterial between Marin and Sonoma Counties in the west and Napa and Solano Counties in the east. The highway carries commuters, tourists, and trucks serving primarily the wine industry. The Average Annual Daily Traffic (AADT) is 28,000 vehicles per day, with 29,500 vehicles per day during the peak month, including 2,300 vehicles during the peak hour. The general speed limit is 55 miles per hour (MPH) on this segment of the highway.

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) proposes roadway rehabilitation on State Route 121, to meet current Caltrans design standards, in Napa County from 0.5 km north of Sonoma County line to Duhig Road (KP 0.5/3.2 or PM 0.3/2.0). See Location Map. The project proposes to widen shoulders in both directions within project limits, to upgrade two curves, and to re-align the intersection of Duhig Road and Route 121. These improvements will enhance the safety and operation of the highway. Construction cost of the project is estimated at \$11,421,000. Additional right of way of approximately 4.23 ha (10.46 acres or 455,637 sq. ft) of agricultural land is needed for the project. Right of way acquisition cost is estimated at \$2,688,000. This project will be submitted as a candidate for the 2002 State Highway Operations and Protection Program (SHOPP) for the 2005/2006 fiscal year (FY) under the HB1 Safety Program (code 20.10.201.010).

The Federal Highway Administration (FHWA) is the federal agency involved with the State on this project. This project has been determined to be Categorical Excluded from the National Environmental Policy Act (NEPA). Caltrans will prepare the FHWA-approved Categorical Exclusion before this proposed project can be approved.

1.2. Background

This project limits were first identified in the “Two & Three Lane Cross-Centerline Accident Monitoring Program of 1997” for investigation to determine if improvements to the highway are needed. The purpose of this program is focused on reducing head-on accidents on two and three-lane roads. As a result of investigation by the Caltrans 04 District Office of Traffic, it was recommended to install the centerline and edge-lines with raised profile thermoplastic traffic striping from KP 0.93 to KP 6.24 (PM 0.58 to PM 3.88) as an interim measure of improvement. Also recommended was to widen the roadway to provide 3.6 m lanes and 2.4 m shoulder from KP 0.50 to 3.20 (PM 0.30 to PM 2.00) as an ultimate measure.

The recommended raised profile thermoplastic striping for the centerline was incorporated into an overlay project, EA 193521, Nap 121 KP 0.50/7.24 (PM 0.30/4.50) from 0.5 km north of Sonoma County line to Junction Route 29. This project was completed in the fall of 2000.

1.3. Purpose and Need

Purpose

The goal of this project is to improve the safety on this segment of State Route 121 (SR 121). To attain this goal, the project proposes to reduce accident rates along the corridor by improving shoulder widths in both directions and to upgrade two curves to current standards. The proposal provides space for motorists to correct their course, thus reducing cross-centerline and run off the road accidents. In addition, this project also proposes to improve sight distance at the skewed intersection of Duhig Road by upgrading the intersection to current standards for a public road intersection.

Need

During the three-year period from January 1, 2001 to December 31, 2003, there were 11 cross-centerline and 17 ran off road accident including 8 people killed in 5 separate accidents on this segment of road. Within the last 10 years, at least 13 people died in traffic accidents along this stretch of road. Causes of accidents were mostly attributed to speeding, driving under the influence of alcohol and improper turning. Significant accident patterns include head-on, hit objects and rear ends. For the last three-year period, the fatal accident rate on this segment of SR 121 is higher than the average rate for similar facilities statewide. Improvement measures such as warning curve signs with advisory speeds were installed at the two curves with not-to-current standard of curvatures. In June 2004, flashing beacons were added to the curve warning signs at these two curves.

The result of the Monitoring Program Study recommended upgrading the two lane undivided conventional highway to provide adequate roadbed width as a possible alternative to reduce the cross-centerline accidents. Per investigation by the District Office of Traffic, improvements include using raised profile thermoplastic striping for the centerline as an interim measure and widening the shoulders and curve corrections as the ultimate measure.

Installation of the centerline with raised profile thermoplastic striping was incorporated in an overlay project, and was completed in the fall of 2000. Even with this improvement, accidents have continued to occur at a higher than average rate. The Office of Traffic then proposed to widen the shoulders and to upgrade the curves with a Project Study Report approved in August 2001. Caltrans uses Traffic Safety Index (TSI) as a method to monitor and measure safety. The TSI for the project was 895. Based on the estimated cost of \$11,421,000 (which includes \$2,688,000 for new right-of-way) and accident data for the last 3 years, the current TSI for the project is now 1027. Projects with a TSI greater than 200 are qualified as candidates for safety projects.

1.4. Project Description

Build Alternative

The design for the project includes widening the shoulders to the standard width of 2.4 m (8 ft) from a third of a mile north of the Sonoma County line to just past Duhig Road KP 0.5-3.20 (PM 0.30-2.00). The existing curve one mile north of the Sonoma County line KP 1.71 (PM 1.06) and the existing curve one and a half miles north of the Sonoma County line KP 2.28 (PM 1.42) will be re-aligned in accordance with design standards for a speed zone of 88 kilometers per hour (55 miles per hour).

There is a history of flooding at Post Mile 1.72. Therefore, the roadway will be raised approximately three feet to accommodate drainage improvement at the location. To accommodate for the shoulder widening over Huichica Creek and the drainage within the project area, the culverts will be extended and the roadway will be modified where necessary.

At the north end of the project, Duhig Road intersects SR 121 at an acute angle of approximately 25 degrees to form a “Y” intersection. Duhig Road is controlled by a stop sign. The project proposes to bring the intersecting angle to 90 degrees.

In order to widen the roadway and upgrade the two curves, approximately 4.23 hectares (10.46 acres or 455, 637 square feet) of additional right of way is needed for the project. The majority of the additional right of way will consist of land used for vineyards. There is also additional minor right of way needed for the Duhig Road realignment. Utility relocation will also be required to accommodate for the proposed improvements. It is anticipated that for the majority of the proposed work, only the shoulder will be closed during the construction while travel lanes remain open to traffic.

No-Build Alternative

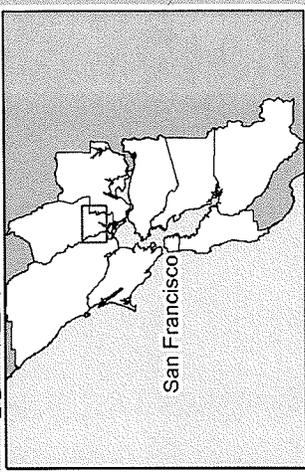
The only other alternative considered was the no build. If the no-build were chosen, there would be no safety improvement made to help reduce accidents in the future.

After comparing and weighing the benefits and impacts of the build alternative, the project development team has chosen this alternative, subject to public review. Final identification of a preferred alternative will occur subsequent to the public review and comment period.

1.5. Permits and Approval Needed

This project will require several permits, agreements, and concurrence from the resource agencies:

- 1602 Lake and Streambed Alteration Agreement (CDFG; Section 1602 of the Fish and Game Code) from the California Department of Fish and Game.
- 401 Water Quality Certification Permit (RWQCB; Section 401 of the Clean Water Act) from the Regional Water Quality Control Board.
- 404 Nationwide Permits 14 (Linear Transportation Projects) and 33 (Temporary Construction, Access, and Dewatering); (ACOE; Section 404 of the Clean Water Act) from the U.S. Army corps of Engineers.
- Section 7 consultation for Threatened and Endangered species with the United States Fish and Wildlife Service (USFWS).
- Section 106 consultation for the California Register of Historic Places with the State Historic Preservation Office.



San Francisco

Solano County Line
Napa County Line

GREEN VALLEY

RED TOP

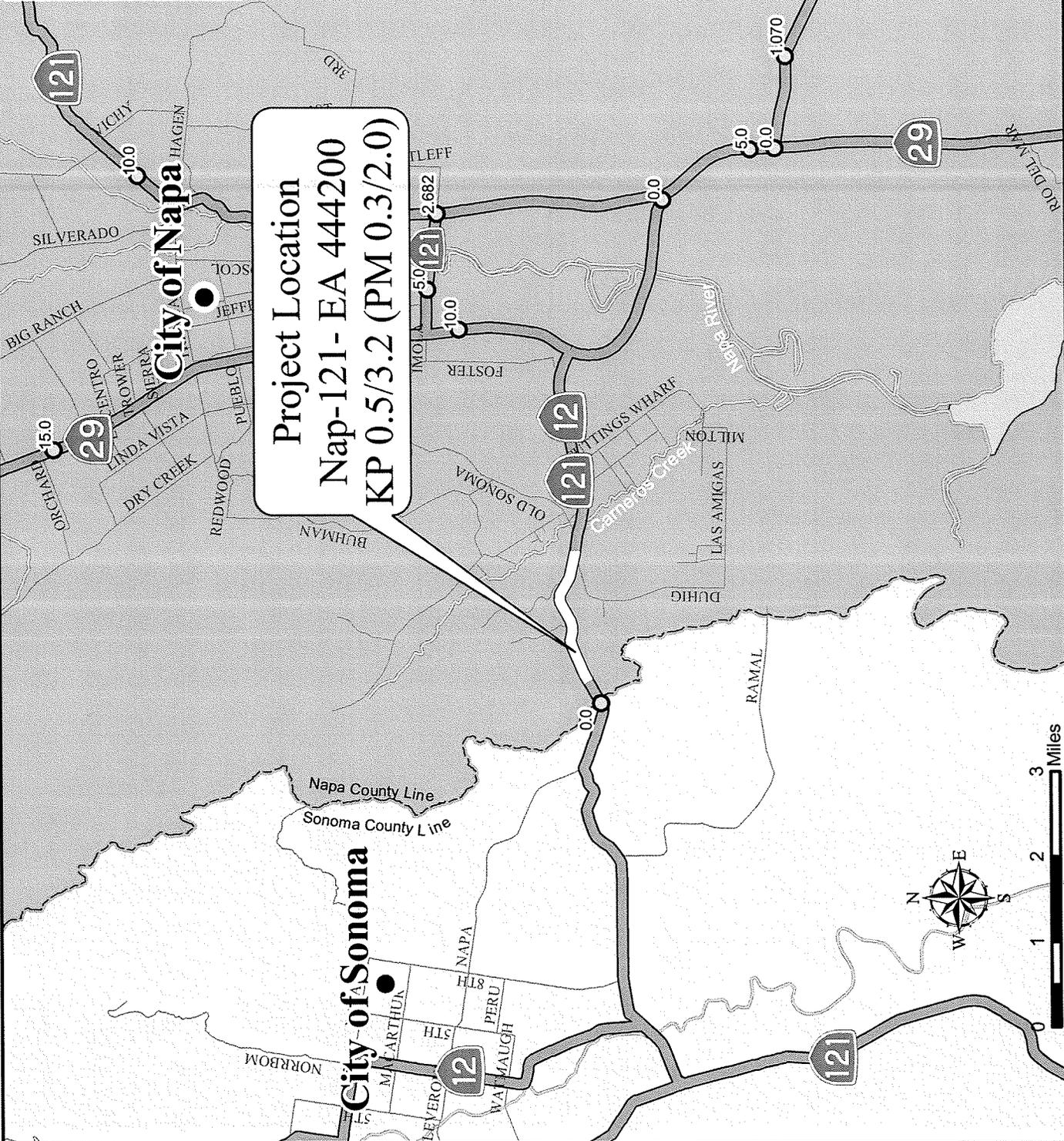


Prepared By:
Office of System and Regional Planning

Project Location
Nap-121 - EA 444200
KP 0.5/3.2 (PM 0.3/2.0)

City of Napa

City of Sonoma



SILVERADO

VICHY
HAGEN
BIG RANCH
SENTRO
ROWER
SIERRA
LINDA VISTA
DRY CREEK
REDWOOD
PUEBLO



ORCARI
JEFF
SCOL

IVOLA
LEFF
FOSTER



WATINGS WHARF
MILTON
LAS AMIGAS
DUHIG
RAMAL

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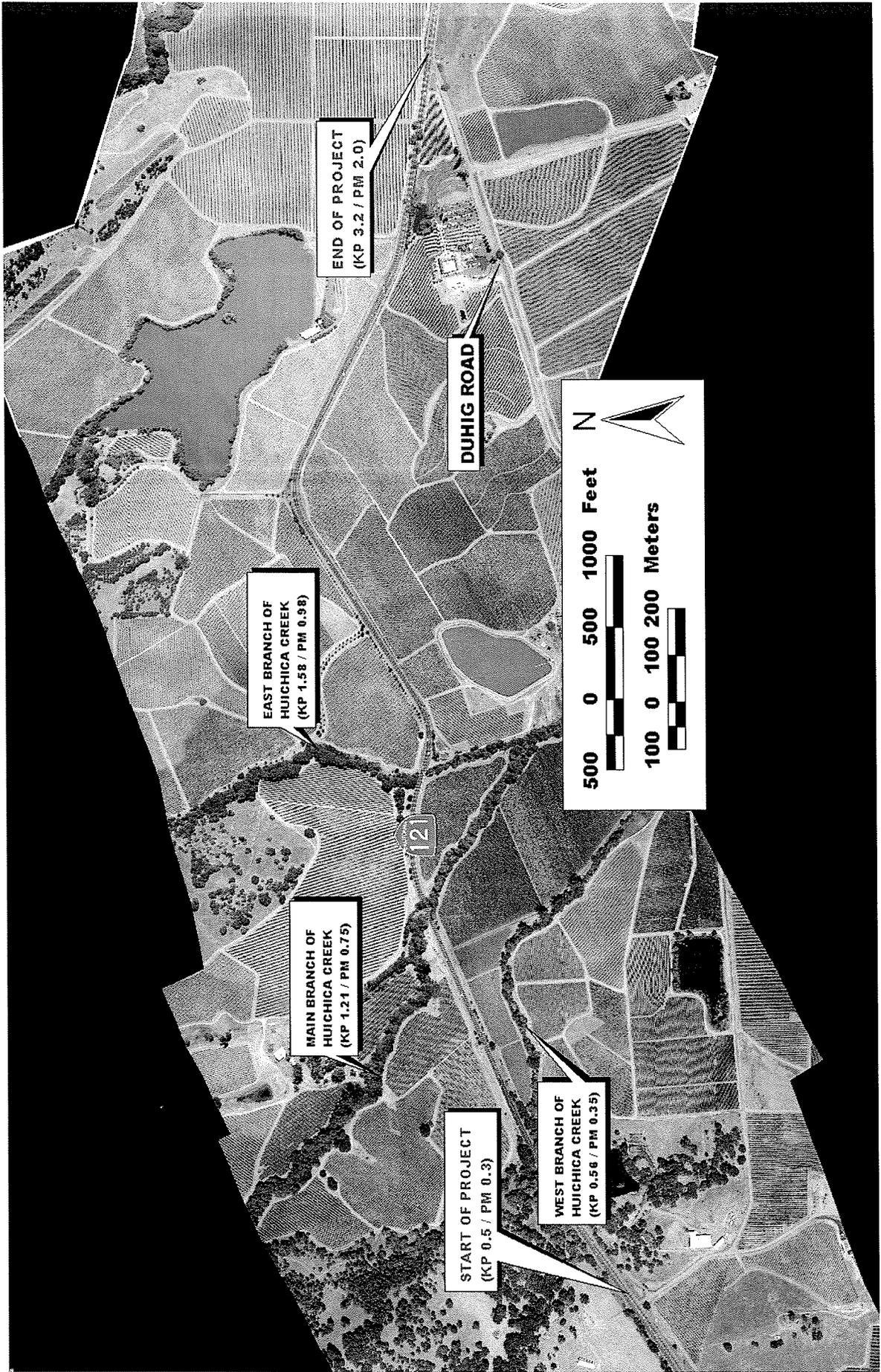
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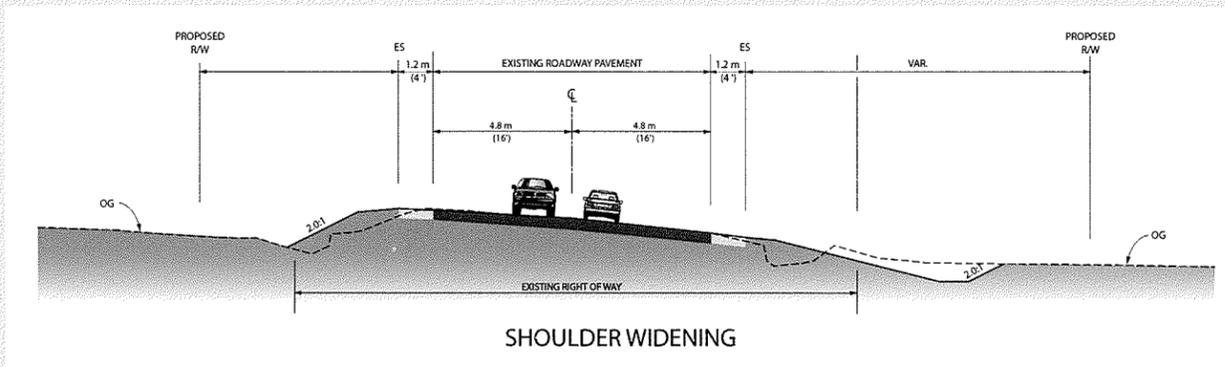
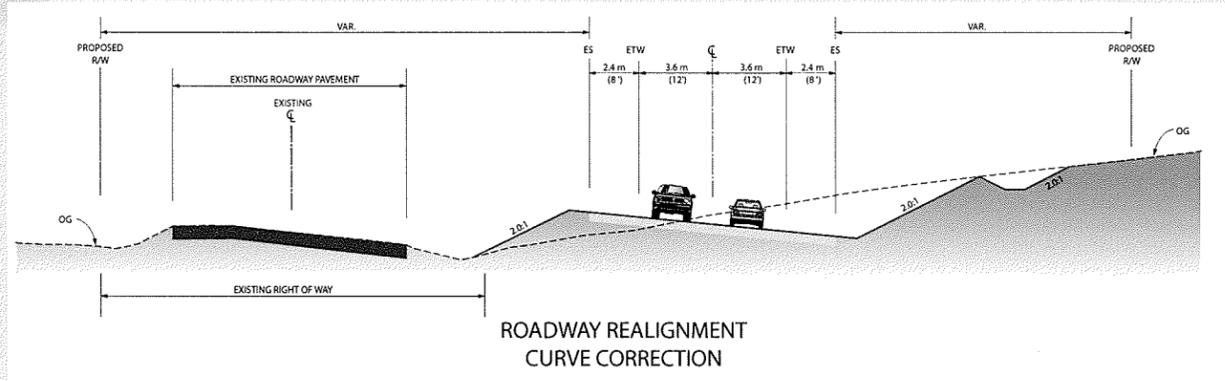
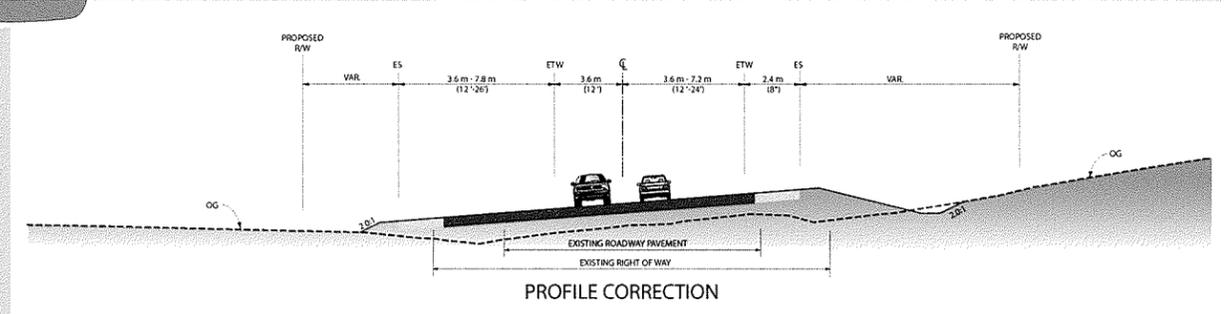
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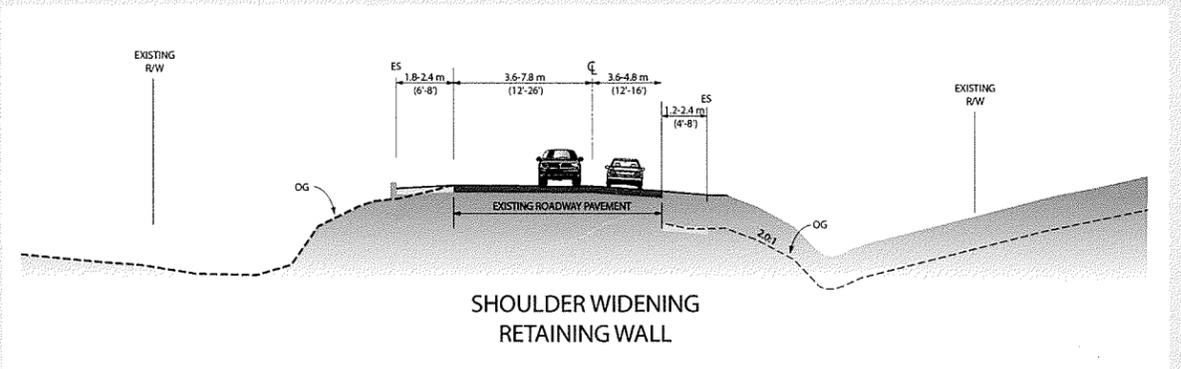
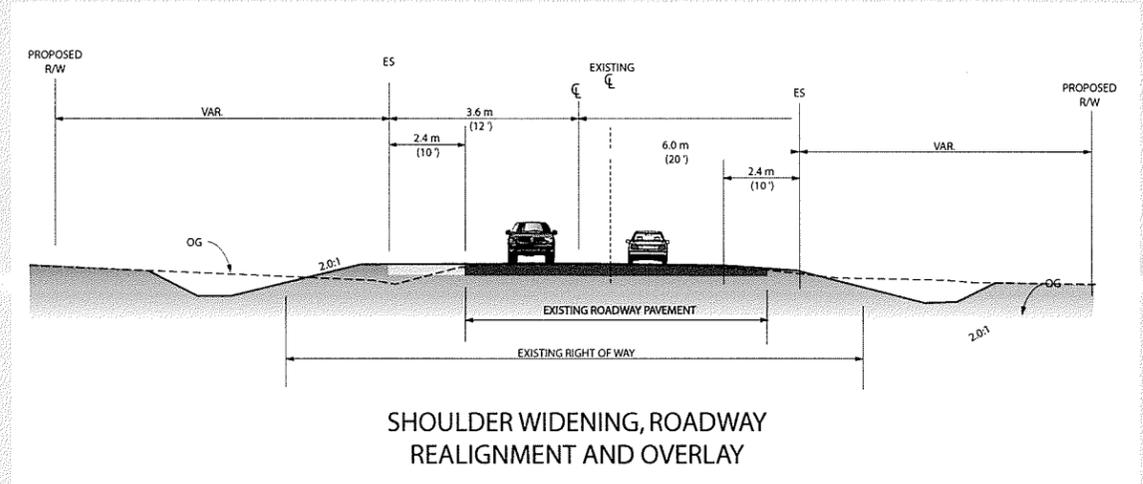




ROADWAY REHABILITATION AND CURVE REALIGNMENT ON NAPA 121 AT DUHIG RD



TYPICAL CROSS SECTIONS



NOTE: CL - Center Line ES - Edge of Shoulder ETW - Edge of Travelway OG - Original Ground
R/W - Right of Way VAR. - Variance



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

This chapter describes the environmental resources of the project areas and how the resources would be impacted by the project. This chapter also discusses the potential environmental impacts of the project and recommended avoidance and minimization measures. This chapter discusses and addresses issues of concern pursuant to the California Environmental Quality Act (CEQA) and provides the basis for responses to the CEQA Checklist Form. Please see Appendix A for the CEQA Checklist.

No significant environmental impacts have been identified for the project as proposed. Caltrans has identified minimization measures that would reduce the potential project impacts to a level of insignificance

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

- **Land Use** - The proposed project would not have an impact the current land use, the project area would stay consistant with the Napa County General Plan of ‘agricultural with rural large lot residential’.
- **Growth** – The proposed project’s purpose is to improve safety. The project would not contribute to an increase in traffic capacity and would not contribute to growth in the surrounding area.
- **Traffic and Transportation/Pedestrian and Bicycle Facilities** – The proposed project does not increase traffic capacity, and therefore will not have a permanent impact on traffic and transportation. The project will actually serve to benefit pedestrian and bicycle traffic as the roadway shoulders will be increased to standard size and the sight distance will be improved. A Transportation Management Plan will be implemented to minimize any temporary impacts during construction.

- **Air Quality** – The proposed project will not increase traffic capacity or congestion and will not impact air quality in the area.
- **Hazardous Waste/Materials** – The project limits for the proposed project did not have any environmental concerns which might affect the scope of the project. Should any soil contamination be found during testing, the soil will be handled according to regulatory requirements.
- **Noise** – The proposed project does not increase traffic capacity, and therefore does not fall into Caltrans and FHWA’s type 1 category for noise impact analysis.
- **Geology/Soils/Seismic/Topography** – The proposed project is not intersected by any known faults. Caltrans uses Maximum Credible Earthquake (MCE) to assess potential seismic shaking and will use this criteria in the design of the culverts and retaining walls on this project.
- **Community Impacts** – The proposed project is located in a rural area and does not include any work in any nearby communities.
- **Cumulative Impacts** – The proposed project would not contribute to cumulative impacts to resources in the project area. Impacts to roadway drainage ditches would be temporary in nature. Impacts to oak trees and to visual/aesthetics would be mitigated through replacement planting within and adjacent to the project area. Impacts to riparian vegetation would be mitigated by replacement planting after completion of roadway construction.

2.1. Human Environment

2.1.1. FARMLANDS/AGRICULTURAL LANDS

Regulatory Setting – NEPA and the Farmland Protection Policy Act (FPPA, USC 4201-4209; and its regulations, 7 CFR Ch. VI Part 658) require federal agencies, such as FHWA, to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. The land does not currently have to be used for cropland. It can be forestland, pastureland, cropland or other land, but not water or urban developed land.

CEQA requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses. Williamson Act contracts are automatically renewed at the end of each 10-year contract period. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. Williamson Act lands are classified as prime or non-prime. Prime Farmland is rated I or II in the Land Use Capability Index or has a rating of 80 through 100 in the Storie Index, a method of evaluation used by the Natural Resources Conservation Service. Non-prime land is usually grazing and rangeland. These lands can also be considered as Open of Statewide Significance.

Environmental Setting - The project area is located within a rural agricultural setting, with large parcels and very low residential density. Many of the parcels adjacent to the project area are vineyards. Of the 10 parcels on the project that are being affected, 8 have Williamson Act contracts with the County of Napa.

Impacts - Although the project would require the state to acquire narrow strips of land adjacent to the highway, the project would not necessitate the cancellation of any Williamson Act contracts, therefore this project would not result in conversion of any farmland to nonagricultural use.

Avoidance, Minimization and/or Mitigation Measures - None required

2.1.2. UTILITIES/EMERGENCY SERVICES

Utilities

Affected Environment – All along the project limits, there is an underground fiber-optic line and numerous overhead utility poles which are jointly operated by SBC and Pacific Gas and Electricity.

Project Impacts – To accommodate the proposed highway shoulder widening, it is expected that multiple utility poles as well as the underground telephone line would

need to be relocated at various points prior to actual roadway construction. Since the utilities are located next to the roadway, any impacts to resources would be included with those attributed to the shoulder widening.

Avoidance, Minimization and/or Mitigation Measures – It is expected that utility relocations would be accommodated within the proposed new right of way. Caltrans would coordinate relocation work with the affected utility companies to ensure minimum disruption of service to customers in the area during project construction.

Emergency Services

Affected Environment – The Napa County Sheriff's Department provides protection for life and property in unincorporated Napa County, which includes the project area. The Napa County Fire Department contracts with the California Department of Forestry (CDF) for fire protection services including coordination with nine volunteer fire departments operating under a County Fire Plan. The California Highway Patrol also provides regular patrols within the project limits.

Impacts – During construction, one roadway shoulder going either southbound or northbound (depending on the construction phase) will be closed, and there may be very short temporary lane closures.

Avoidance, Minimization and/or Mitigation Measures – A Transportation Management Plan will be prepared before construction, minimizing any temporary impacts.

2.1.3 VISUAL / AESTHETICS

The following technical report has been referenced for this document.

- Draft Visual Impact Assessment, January 2005.

Regulatory Setting - The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive and aesthetically and culturally pleasing

surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

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

There are two primary planning documents which provide direction regarding the scenic/visual resources within the study area. These plans include;

County of Napa Conservation Element of the General Plan

County of Napa Scenic Highway Element of the General Plan

These plans set forth scenic/visual resource goals and policies intended to preserve, enhance, restore and respect scenic vistas, and visually important landscapes in Napa County. The No-Build Alternative and the proposed project were evaluated to determine their consistency with the scenic/visual resource goals and policies in each of these elements.

Environmental Setting - In the project area, Route 121 is an undivided, two-lane, conventional highway with narrow shoulders. The surrounding area is rural in character and is dominated by acres of vineyards blanketing the rolling terrain of southern Napa County and the highway is primarily flanked by these vineyards. This segment of Route 121 is not part of the State Scenic Highway system and is not eligible for designation as a State Scenic Highway. It is a candidate for a Napa County Scenic Highway Designation as described in the Scenic Highway Element of the Napa County General Plan.

The predominant feature of the landscape in this area is the hillside vineyards, which gives the area scenic appeal characteristic of the Napa/Sonoma wine-producing region. The focus of views from the highway is the neatly arranged vineyard rows covering the rolling hills. In some places, thin bands of trees stand alongside the road along with flowering ornamental shrubs that line the edge of several of the vineyards adjacent to the road. Groups of native California oak trees away from the highway

punctuate the hillside vineyards. Development in the form of houses or other buildings is sparse and only a few, widely scattered residences are seen within the area. An overhead utility line on wood poles runs along the edge of the highway.

Impacts - Implementation of the project would cause temporary and permanent changes in the appearance of the highway. The permanent changes would be relatively minor and would result from realignment of the highway at two curves, a greater paved surface due to shoulder widening and any related alterations to topography, including tree removal. At project completion, areas disturbed by the contractors' activities would be visible until vegetation is re-established and is considered a temporary condition. There would be the addition of a new retaining wall in one area, but it would be on the downhill side of the highway and therefore not a prominent visual feature.

There are approximately 200 trees within the project area of potential impact along the highway that could be disturbed during project construction. Most of them occur along and near the existing truck climbing lane near the southern end of the project area and are part of a larger stand of naturally occurring oaks and other native species. If trees at the edge of the highway in this area were removed to accommodate the project, many other trees that are part of the larger stand would remain. Other trees that could potentially be removed include those that have been planted in a row along the highway at the edge of the vineyard, or are riparian species that occur naturally at the three Huichica Creek crossings. At the edge of the highway in the immediate vicinity of the existing Duhig Road intersection, there are approximately a dozen, large, California Walnut trees (*Junglans californica*). These trees could be a remnant of some larger grove that occupied the land before the vineyards were planted. The walnut trees are approximately 50 years old and have suffered varying degrees of storm damage over time. They contribute little in the way of scenic value. It is likely that they will have to be removed in order to accommodate the improvements to the highway.

The project would not have a substantial adverse effect on scenic vistas, would not substantially damage scenic resources, or would not substantially degrade the existing visual character or quality of the project area. No aspect of the project would create a new source of substantial light or glare. Although some change in the highway's appearance would be evident, the visual character of the highway corridor would be

primarily unchanged and visual quality would remain high. With the application of the mitigation measures described below, the project's visual impact would be less than significant.

Avoidance, Minimization and/or Mitigation Measures - To mitigate the project's visual effects, excavated slopes and embankments shall be re-vegetated with native plant materials compatible with the surrounding plant community. Trees outside the excavation and embankment slope lines will be protected from damage by construction equipment and materials. Where the two curves will be realigned, the old pavement will be removed and the former roadway will be contour graded as necessary and re-seeded with native grasses to remove all indication of the former alignment. Cut and fill slopes will be contour graded and slope rounding will be employed, except where trees that otherwise would be unaffected by the project would be disturbed by such grading. Trees that are removed will be replanted with native tree seedlings at a minimum ratio of 1 to 1 (one tree planted for each one removed). Where feasible, trees will be replanted along the State right-of-way within the project limits (i.e., curve re-alignments). Note that the amount of State-owned land along the highway is limited to a narrow band, and to maintain proper tree set backs for traffic safety, trees may need to be planted at an off site location and provided with 3 years of plant monitoring to ensure successful establishment.

2.1.4 CULTURAL RESOURCES

The following technical report has been referenced for this document.

- Archaeological Survey and Evaluation Report, February 2005

Regulatory Setting -“Cultural Resources” as used in this document refers to historic and archaeological resources. The primary federal laws dealing with historic and archaeological laws include:

The National Historic Preservation Act, as amended, (NHPA) sets forth national policy and procedures regarding “historic properties” – that is, districts, sites, buildings, structures and objects included in or eligible for the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to consider the

effects of their undertakings on such properties following regulations set forth by the Advisory Council on Historic Preservation (36 CFR 800).

Under California law, cultural resources are protected by the California Environmental Quality Act (CEQA) as well as Public Resources Code Section 5024.1, which established the California Register of Historic Places. Section 5024.5 requires state agencies to provide notice to, and to confer with, the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historic resources.

Environmental Setting – A review of existing literature documenting cultural resources and on-the-ground field survey for archaeological and historic architecture resources in the project study area were completed between June 2003 and September 2004.

Prehistoric Archaeology

The literature search and field survey indicated that one prehistoric archaeological site that had been previously identified within the project area and that nine additional prehistoric archaeological sites were identified within a one-mile radius. Two other prehistoric sites are outside the direct project footprint, but are closely situated to the previously identified site and may actually be extensions of that site. The site is a late prehistoric deposit characterized by dark midden soil with a high concentration of obsidian flakes, obsidian tools, ground stone, shell, bone, and fire-affected rock. Caltrans has determined that the original site and the associated deposits at the other two sites are eligible for listing on the National Register of Historic Places, for their potential to contain information that could answer questions important to prehistory.

Historic Archaeology

The project area is in the vicinity of the Huichica Rancho, land granted to Jacob Leese in 1844. While no physical remains of the rancho period were identified during the surface survey, there is likelihood that remains will be encountered during construction. Should these remains be present within the project footprint, they would be eligible for the National Register for their potential to answer important research questions

Historical Architecture

A literature search for architectural resources indicated that there are four historic-era structures and one historic-era building located within a one-mile radius of the project

area. The closest of these is the Talcoa Winery site, approximately 300 feet from the State Route 121 right-of-way, but outside of the direct project footprint. A Caltrans architectural historian surveyed the project footprint, with full access to all adjacent parcels. Within the project footprint, no properties with buildings or structures older than 50 years were identified.

Project Impacts - As currently planned, the proposed project will physically impact large portions of the previously identified site, a prehistoric archaeological site eligible for the National Register of Historic Places. According to 36 CFR §800.5(a)(2), “Adverse effects on historic properties include, but are not limited to, (i) Physical destruction of or damage to all or part of the property.”

Avoidance, Minimization and/or Mitigation Measures - In anticipation of resolving adverse effects to the sites, Caltrans and the Federal Highway Administration has prepared to enter into a Memorandum of Agreement (MOA) with the State Historic Preservation Officer. The agreement will include development of a Data Recovery Plan to recover significant information from the prehistoric deposits at the original site and historic deposits associated with the Huichica Rancho, should they be discovered.

Because the previously identified archaeological site is a late-period prehistoric “mound” site, it is likely to contain human burials and disassociated human remains. If human remains are discovered, State Health and Safety Code Section 7050.5 states that disturbances and activities shall cease. The County Coroner must be notified of the find immediately so that he/she may ascertain the origin. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, then the coroner will notify the Native American Heritage Commission who will then notify the Most Likely Descendant (MLD). The MLD may inspect the remains with the approval of the landowner or the landowners’ authorized representative. The MLD may recommend scientific removal and nondestructive analysis.

2.2. Physical Environment

2.2.1 HYDROLOGY AND FLOODPLAIN

Regulatory setting - Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in

floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A.

The 100 year-floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the 100-year floodplain”.

Environmental Setting – Huichica Creek is an intermittent creek that flows from north to south, and empties into the Napa Slough before draining into the Napa River, approximately 8 kilometers (5 miles) to the southeast of the project site.

Impacts – There is a history of local drainage overtopping the roadway due to hydraulic structure insufficiency, however the project does not lie within a FEMA recognized floodplain as witnessed by Federal Flood Insurance Rate Map/Community-Panel Number 060205 0420 B.

Avoidance, Minimization and/or Mitigation Measures – Drainage capacity within the project limits will be increased by the extension of culverts and raising of the roadway.

2.2.2 WATER QUALITY AND STORM WATER RUN OFF

Regulatory Setting - The primary federal law regulating Water Quality is the Clean Water Act; (CWA) issued by the U.S. Environmental Protection Agency (EPA). The EPA delegated its authority in California to the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB). The RWQCB prepares and adopts the Water Quality Control Plan, (Basin Plan), a master policy document for managing surface and groundwater quality in the region. The State Water Resources Control Board and the Regional Water Quality Control Board issue permits which implement the standards included in the Basin Plan as well as other requirements of the State Water Code and the federal Clean Water Act.

Section 401 of the CWA requires a water quality certification from the State Board or Regional Board when a project: 1) requires a federal license or permit (a Section 404 permit is the most common federal permit for Department projects), and 2) will result in a discharge to waters of the United States.

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit system which directs that storm water discharges are point source discharges and establishes a framework for regulating municipal and industrial storm water discharges. To ensure compliance with Clean Water Act Section 402 the State Water Resources Control Board (SWRCB) has issued Caltrans an NPDES Statewide Storm Water Permit to regulate storm water discharges from Caltrans facilities (Order No. 99-06-DWQ, CAS000003).

In addition, the SWRCB has issued a statewide Construction General Permit for construction activities (Order No. 98-08-DWQ, CAS000002), that applies to all storm water discharges from land where clearing, grading, and excavation result in disturbances of at least 0.4 hectares (1 acre) or more. Construction activity that results in soil disturbances of less than 0.4 hectares (1 acre) is subject to the General Permit if the construction activity is part of a larger Common Plan of Development totaling 0.4 hectares (1 acre) or more of soil disturbing activities, or if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. All projects that are subject to the construction general permit require a Storm Water Pollution Prevention Plan (SWPPP). Caltrans' construction projects that are less than 0.4 hectares (1 acre) need to incorporate Water Pollution Prevention Plans (WPPP).

Environmental Setting - The project is located in western Napa County, within the San Francisco Bay Regional Water Control Board (RWQCB) jurisdiction (Region 2), which is responsible for implementation of State and Federal water quality protection laws and regulations in the vicinity of the project site.

STORM WATER

This project proposes safety improvements on Route 121 from 0.5 kilometers east of Sonoma County line to Duhig Road (KP 0.50 to 3.20 (PM 0.3 to 2.0)). The project site is within the San Pablo Basin Watershed. Storm water from the western portion of this project drains to Huichica Creek. Storm water from Huichica Creek continues to Hudeman Slough, to Napa Slough, to Napa River and eventually to San Pablo Bay. The eastern portion of the project (east of Station 119+00) drains via an unnamed creek to Carneros Creek. Storm water from Carneros Creek flow to the Napa River and eventually to San Pablo Bay. Huichica and Carneros Creek, which are the direct receiving water bodies for this project, are not on EPA's 303(d) List of Water Quality Limited Segments. Region 2 RWQCB Basin Plan also has not established any beneficial uses for Huichica and Carneros Creeks.

GROUNDWATER

This project is located in the Napa-Sonoma Groundwater Basin. The existing beneficial uses of this groundwater resource according to the Basin Plan include municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply.

Impacts

STORM WATER

Caltrans has performed many studies to monitor and characterize highway storm water runoff throughout the State. Pollutants of Concern in Caltrans runoff found from the “Final Report of the Caltrans BMP Retrofit Pilot Program”, were phosphorus, nitrogen, copper (total or dissolved), lead (total or dissolved), zinc (total or dissolved), sediments, general metals (unspecified metals), and litter. Some sources of these pollutants are natural erosion, phosphorus from tree leaves, combustion products from fossil fuels, trash and falling debris from motorists, and the wearing of break pads.

The Route 121 Rehabilitation and Curve Corection project is a safety project. Only one build alternative is being considered. This alternative proposes to widen existing shoulders to current standards in both directions within project limits, to upgrade two curves, and to realign Duhig Road where it intersects with SR 121. The added pavement for shoulders and curve and intersection improvements will increase roadway runoff. The area of soil disturbance is approximately 7.35 hectares (18.16 acres), adding approximately 1.17 hectares (2.88 acres) of new pavement (impervious) area. There will be some additional runoff from this added impervious area.

The no-build would not have any water quality impacts.

GROUNDWATER

Groundwater may be encountered during excavation work for the widening of SR 121 at the Huichica creek and its tributaries. Groundwater may also be encountered during the extension work of the culvert.

Avoidance, Minimization and/or Mitigation Measures

1) Section 401 of the Clean Water Act

Due to the drainage improvement work within Huichica and Carneros Creeks, and a need for an Army Corps 404 permit, a 401 Water Quality Certification from Region 2, RWQCB is required.

Any impacts to the Waters of the US will be minimized. Mitigation measures will be considered for any unavoidable impacts to the Waters of the US. Off-site mitigation is being considered due to the lack of area within Caltrans' Right of Way.

2) Section 402 of the Clean Water Act

According to Caltrans NPDES permit and the Construction General Permit, Best Management Practices (BMPs) will be incorporated into this project to reduce the discharge of pollutants during construction as well as permanently to the Maximum Extent Practicable (MEP). These BMPs fall into three categories, Temporary Construction Site BMPs, Design Pollution Prevention BMPs, and Permanent Treatment BMPs.

(a) Construction Site BMP

Construction Site BMPs are implemented during construction activities to reduce pollutants in storm water discharges throughout construction. One critical construction activity, dewatering, may be necessary for this project because of the possibility of encountering groundwater during excavation in Huichica Creek and its tributaries, including culvert extension. If necessary, early discussion will be initiated regarding the handling and disposal of this water during the design phase.

Dewatering BMPs and temporary holding devices such as Baker Tanks will be included in the special contract provisions to meet the dewatering requirements. Grading of existing slopes will be required. However, the use of retaining structures, especially in excavation areas, will minimize the amount of grading required. Temporary silt fence, stockpile cover, stabilized construction entrance/exit and temporary soil stabilizers are some of the temporary erosion and water pollution control measures that will be utilized in combination to prevent and minimize soil erosion and sediment discharges during construction. Given an anticipated soil disturbance of greater than 0.4hectares (1 acre), a Storm Water Pollution prevention Plan (SWPPP) will be developed during construction. This dynamic document

addresses the deployment of various erosion and water pollution control measures that are required commensurate to changing construction activities.

(b) Permanent Design Pollution Prevention BMPs

Design Pollution Prevention BMPs are permanent measures to improve storm water quality by reducing erosion, stabilize disturbed soil areas, and maximize vegetated surfaces. Erosion control measures will be provided on all disturbed areas. Erosion control measures will utilize a combination of source and sediment control measures to prevent and minimize erosion from disturbed soil areas. Source controls will utilize erosion control netting in combination with hydroseeding. The biodegradable netting is effective in providing good initial mechanical protection while seed applied during the hydroseeding operation germinates and establishes itself. Other forms of source control such as tacked straw will also be used when applicable. Sediment controls such as biodegradable fiber rolls are used to retain sediments and to help control runoff from disturbed slope areas. Due to the steep terrain of the project location, it will be further investigated in design if slope paving or lining for ditches is needed to further minimize erosion potential.

Outlet protection and velocity dissipation devices placed at the downstream end of culverts and channels are also Design Pollution Prevention BMPs that reduce runoff velocity and control erosion and scour. The need of these devices for this project will be further investigated during the design phase.

(c) Permanent Treatment BMPs

Treatment BMPs are permanent devices and facilities treating storm water runoff. Caltrans approved Treatment BMPs are Biofiltration Swales, Infiltration Basins, Detention Basins, Traction Sand Traps, Dry Weather Flow Diversions, Media Filters, Gross Solids Removal Devices (GSRDs), Multi-chamber Treatment Trains, and Wet Basins.

Since this project is a critical safety improvement project (Safety Designation 010) and since it is not in an urban MS4 system (Municipal Separate Storm Sewer Systems-storm drain system, regulated by the federal Phase I and Phase II storm water regulations), it is exempt from incorporating Permanent Treatment BMPs. However, treatment BMPs are still being considered due to the size of the project. Physical site constraints such as being adjacent to environmentally sensitive areas,

and lack of right of way minimize the types of Treatment BMPs that can be implemented. Biofiltration Strips and Swales are the only candidates that appear to be feasible and these options will be further investigated in the design.

2.3. Biological Environment

The following technical reports have been referenced for this document.

- Natural Environment Study, January 2005.
- Biological Assessment for California Freshwater Shrimp and California Red-Legged Frog, January 2005.
- Biological Assessment for Central California Coastal Steelhead, January 2005.

Natural Communities

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

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in the Threatened and Endangered Species section 2.3.2. Wetlands and other waters are also discussed in section 2.3.1.

The environment surrounding the project area consists mainly of vineyards and wineries. Caltrans biologists did not identify the presence of any sensitive plants or suitable habitat for sensitive plant species during field surveys. The California Department of Fish and Game (CDFG) believes Huichica Creek, crossed by SR 121 at three locations, can provide a migration corridor for the state and federally threatened Central California Coastal steelhead (*Onchorhynchus mykiss*). Huichica Creek also provides habitat for the state and federally endangered California freshwater shrimp (*Syncaris pacifica*). Huichica Creek may also provide a dispersal

corridor for the state and federally threatened California red-legged frog (*Rana aurora draytonii*). Caltrans biologists detected the presence of steelhead in Huichica Creek during field surveys. Caltrans contracted biologists have identified California freshwater shrimp in Huichica Creek during previous surveys. California red-legged frogs were not detected during the surveys, however it was believed that habitat for these species may be present near the project area.

The project will involve minor alterations to wetlands and waters of the U.S., as discussed under wetlands and “other waters of the United States” in Section 2.3.1.

Biological resources that would not be impacted by the proposed project are not discussed.

2.3.1 WETLANDS AND OTHER WATERS OF THE UNITED STATES

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

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredge or fill material can be permitted if a practical alternative exists that is less damaging to the aquatic environment. Discharge of dredge or fill material cannot be permitted if the nation’s waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive

order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

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

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

Environmental Setting – Preliminary estimates show that approximately 0.12 hectare (0.30 acre) of jurisdictional waters of the United States (including 0.04 hectare (0.10 acres of wetlands), under jurisdiction of the ACOE, exists with the project area. These jurisdictional areas include 0.04 hectare (0.10 acre) within the banks and below the ordinary high water mark (OHWM) of Huichica Creek and 0.08 hectare (0.20 acre) of ditches along the project area.

Impacts – As a result of this project, Caltrans will affect 0.12 hectare (0.30 acre) of areas defined as “waters of the United States” by ACOE, including 0.04 hectare (0.10 acre) of areas defined as wetlands.

Avoidance, Minimization and/or Mitigation Measures - Caltrans will implement measures to avoid impacts to other ACOE jurisdictional areas including the installation of ESA fencing. Caltrans proposes compensation for effects to “waters of the United States” by restoring portions of the main branch and east branch of Huichica creek downstream of the project area. Caltrans will do this by replanting native riparian vegetation along the affected creek banks, and enhancing the function and value of roadside ditches within or adjacent to the project area that will not be impacted by the project.

2.3.2 PLANT SPECIES

Regulatory Setting - The U.S. Fish and Wildlife Service (USFWS) and CDFG share regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.3.2 in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et. Seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et. Seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Environmental Setting - Caltrans biologists did not identify sensitive plants or habitat supporting sensitive plant species within or adjacent to the project area during surveys conducted between May and November 2003.

There are three different types of biological communities within and near the project area. One community consists of upland habitat near the roadway dominated by disturbed exotic annual grasses, herbs and shrubs. The second community consists of roadside ditches throughout the project area exhibiting patches of hydrophytic (water-loving) vegetation. The third community consists of riparian habitat of Huichica Creek consisting mostly of native trees and shrubs along the banks of the creek.

Impacts - Caltrans biologists did not identify critical habitat for sensitive species of plants in the project area. Therefore, no critical habitat will be impacted by the project.

Avoidance and Minimization and/or Mitigation Measures - Caltrans biologists did not identify critical habitat for sensitive species of plants in the project area. Therefore, avoidance or minimization measures for critical habitat will not be necessary.

2.3.3 ANIMAL 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 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 2.3.2 below. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environment 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

Environmental Setting - Huichica Creek has historically provided habitat for the California freshwater shrimp. Caltrans biologists identified at least five juvenile Central California Coastal Steelhead in the main branch of Huichica Creek just upstream and downstream of the culverts. A Caltrans biologist identified several birds including red-winged blackbird, European starling, dark-eyed junco, red-tailed hawk, great blue heron, northern oriole, American crow, and northern mockingbird. Caltrans biologists observed cliff swallow nests inside the East Huichica Creek culvert during the same field survey on May 6, 2003.

Caltrans biologists identified a bullfrog in the main branch of Huichica Creek during the June 27, 2003 day survey, and bullfrogs in the ditches in the project area during surveys on November 26, 2003 and September 27, 2004. Caltrans biologists also observed unidentified tadpoles at a culvert. These tadpoles are likely to be Pacific treefrog tadpoles based on their characteristics.

Discussion on Northwestern Pond Turtle

The northwestern pond turtle is listed as a state species of special concern. A northwestern pond turtle was observed in Huichica Creek. Steps will be taken in the construction process to avoid impacts to northwestern pond turtles. Any northwestern pond turtles seen in the vicinity of the project site will be picked up and moved by a qualified biologist to a location downstream and away from the construction zone. There will be minimal impacts to northwestern pond turtles as a result of this project.

2.3.4 THREATENED AND ENDANGERED SPECIES

Regulatory Setting - The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 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. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct”. See Appendix C for USFWS correspondence.

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 habitat. The California Department of Fish and Game Code (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits “take” or any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill”. CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For 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.

Discussion of Central California Coastal Steelhead(*Oncorhynchus mykiss*, CCCS

Environment Setting – Huichica Creek is considered by California Department of Fish and Game to be a migration corridor for the federally threatened Central California Coastal steelhead (*Oncorhynchus mykiss*, CCCS). The Central California Coastal steelhead have been listed as a federally “threatened” species according to the

NOAA Fisheries. This species has been identified as being in Huichica Creek. Steelhead are born in fresh water, emigrate to the ocean for two to three years to complete most of their growth cycle, and then return to fresh water to spawn. In California, most steelhead spawn from December through April in small streams and tributaries where cool, well oxygenated water is available year-round.

Avoidance and Minimization Measures – Caltrans will implement several measures that will avoid and minimize impacts to the Central California Coastal steelhead and its habitat, these measures are listed in detail in the BA for CCCS, dated January, 2005.

Discussion of California Freshwater Shrimp (*Syncaris pacifica*), CFWS

Environmental Setting - Huichica Creek is considered by USFWS as one of the 17 watersheds in California to support the federal and state endangered California freshwater shrimp (U.S. Fish and Wildlife Service, 1998). The CFWS is the only native stream-dwelling shrimp found in California. The CFWS generally produces once a year with mating occurring in the fall. The female cares for the eggs during the winter incubation period. Females produce about 50-120 eggs on average. Young are hatched in May or early June and reach sexual maturity by the end of two years and live as long as three years or more. Existing populations of CFWS are threatened by introduced fish, deterioration or loss of habitat resulting from diversion of water, impoundment, livestock and dairy activities, agricultural activities and developments, flood control activities, gravel mining, timber harvesting, migration barriers, summer dams and water pollution.

Avoidance and Minimization Measures – Caltrans will implement several measures that will avoid and minimize impacts to the California Freshwater Shrimp and its habitat. These measures are listed in detail in the BA for CFWS and CRLF (California red-egged frog, dated January, 2005).

Discussion on California Red-Legged Frog (*Rana aurora draytonii*), CRLF

Environmental Setting - There is suitable habitat prevalent within Huichica Creek for the California red-legged frog (*Rana aurora draytonii*, CRLF), a federally threatened and state listed species of special concern. While the habitat does not seem suitable for breeding, it may be used by the CRLF as a migration corridor. The CRLF can travel up to 8.0 kilometers (5.0 miles) to reach breeding habitat. Ponds

found adjacent to Huichica Creek within 8.0 kilometers (5.0 miles) upstream and downstream of the project could provide CRLF breeding habitat.

CRLF is the largest native frog found in the western United States. CRLF requires habitat that consists of both aquatic and riparian elements. The project site does occur within the current distribution of CRLF since the entire county of Napa is within the current range. There is no history of the CRLF found within 8.0 kilometers (5.0 miles), and Caltrans biologists have not identified CRLF's in the project area during field surveys between July and November of 2003. Also, the project area does not fall within the Core Area No. 15 (Jameson Canyon and Lower Napa River) for CRLF in Napa County.

Avoidance and Minimization Measures – Caltrans will implement several measures that will avoid and minimize impacts to the California red-legged frog and its habitat. These measures are listed in detail in the BA for CFWS and CRLF, dated January, 2005.

Project Impacts – Permanent impacts will result from extending the existing curves within the project limits. Caltrans will modify roadway drainage features where necessary. The widening over Huichica Creek is likely to result in the removal of some of the larger trees near the creek. This loss of tree habitat will result in decreased shading of the creek and may increase the water temperature of Huichica Creek. In turn, this may affect the aquatic species in the creek.

Temporary impacts will result from grading the creek banks near the three culvert crossings to provide the contractor with access to the creek for culvert widening. Caltrans will access Huichica Creek between the low-flow months of June and October to avoid impacts to aquatic species. After completion of the project, Caltrans will remove from the streambed all materials used to maintain flow and divert water from the project area during the construction period, including cofferdams, pipe, filter fabric, and gravel. Caltrans will dispose of all excess soil at an approved upland site.

Although very unlikely, possible impacts to CCCS include disrupted migration, entrapment, harassment, and mortality. However, if the provisions of the 1602 Lake and Streambed Alteration Agreement, particularly those pertaining to the construction of the water diversion structure are closely adhered to, the likelihood of these impacts occurring is very small.

Summary of Biological Mitigation Measures

Caltrans will plant all slopes affected by the project with native grasses and shrubs to stabilize the slopes against erosion. Caltrans may also plant site-adapted native trees species such as willows (*Salix sp.*) and white alder (*Alnus rhombifolia*) on the slopes to compensate for tree removal along Huichica Creek. These trees will provide shading for the creek once they have matured, lowering the water temperature for aquatic organisms, and stabilizing the banks against the erosive effects of high runoff. Caltrans will also cover newly planted areas with a biodegradable straw/coconut erosion control mat as directed by the Caltrans Office or Landscape Design, CDFG, and the Caltrans Office of Biological Sciences and Permits. Caltrans will monitor the plantings over a period of time to ensure efficient survival success and growth.

To mitigate for riparian impacts during construction, Caltrans will restore the main branch and the east branch of Huichica Creek downstream of each culvert. Caltrans will fix the downstream drops at each branch just downstream of the culverts, and the resulting design of the restoration will allow for improved passage for aquatic species through the project area.

Caltrans will replace the existing culvert at the west branch of Huichica Creek with a reinforced concrete box culvert measuring 2.7 meters (9 feet) high by 2.1 meters (7 feet) wide to increase hydraulic capacity and to enhance passage for aquatic species. Caltrans will bury approximately 0.6 meter (2 feet) of the culvert below the existing stream flow line to allow for the development of a natural bottom.

CDFG and NOAA will require that Caltrans meet the criteria for fish passage through the culverts at Huichica Creek. New guidelines enacted by NOAA require that modifications or installation of aquatic structures meet low-flow fish passage guidelines. Inclusion of the structures are also required as part of the USACE Nationwide Permit. Due to the yearly migration of CCCS in and out of the Huichica Creek Watershed, CDFG and NOAA will require Caltrans to comply with the guidelines and improve the fish passage at the project site. Therefore, the project will include specific design criteria that will allow CCCS to pass freely up and downstream of the bridge. Caltrans will design the fish passage facility in consultation with NOAA Fisheries. The approval process of the fish passage design cannot begin until 75% complete design plans have been submitted to NOAA. Caltrans will submit the design plans to the appropriate agencies once the plans are 100% complete.

Caltrans will install exclusionary measures to prevent swallows from nesting under the bridges during the construction period. Swallows are protected under the Migratory Bird Treaty Act. Caltrans will install these exclusionary measures prior to March 1 in the year of construction.

2.4 Construction Impacts

All construction impacts are temporary for this project. There will be two stages of construction on this project. During stage one (shoulder widening on southbound direction), temporary railing (K type) will be placed on the southbound direction and two-way traffic will be maintained. The new curve alignment and new culvert, retaining wall, new profile at PM 1.72 and part of the culverts at PM 1.72 and 2.0 will be reconstructed at this time. During stage two (shoulder widening on northbound direction), temporary railing (type K) will be placed on the northbound direction and two-way traffic will be maintained. The new curve alignment at PM 1.5 and the rest of the culverts at PM 1.72 and 2.0 will be reconstructed at this time.

It is anticipated that for the majority of the proposed work, only the shoulders will be closed during construction while two-way travel remains open to traffic. However, there may be a short period of one-way traffic control needed. The Transportation Management Plan (TMP) will be prepared in the design phase and would reflect this possibility.

The Special Provisions and Standard Specifications in the construction contract for the proposed project would include requirements to minimize or eliminate construction related dust through the application of water or dust palliatives, Caltrans and its contractors would comply with "fugitive dust" emissions rules and policies to minimize dust impacts.

Chapter 3 – Comments and Coordination

During the preparation of this document, the following agencies were consulted:

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service

California Department of Fish and Game

National Oceanic Atmospheric Administration Fisheries

Office of Historic Preservation

Napa County Department of Conservation, Development and Planning

Caltrans made an Initial Study / Proposed Mitigated Negative Declaration (CEQA) available for public review and comment between May 1 to May 31, 2005.

Chapter 4 - List of Preparers

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Steve Middleton, Associate Landscape Architect
Visual Impact Analysis

Andre Nguyen, Senior Transportation Engineer
Air Quality and Noise Reports

Chris Wilson, Senior Transportation Engineer

Hazardous Materials Report

Analette Ochoa, Senior Transportation Engineer

Water Quality and Storm Water Reports

Michael Nguyen, Transportation Engineer

Project Engineer

Bill Hayes, Senior Transportation Engineer

Senior Design Engineer

Ahmad Rahimi, Senior Transportation Engineer

Project Manager

Appendix A CEQA Checklist

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

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

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

IV. BIOLOGICAL RESOURCES -- Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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V. CULTURAL RESOURCES -- Would the project:

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

VI. GEOLOGY AND SOILS -- Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Less Than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact	

VII. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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"/>
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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XI. NOISE –

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII. POPULATION AND HOUSING -- Would the project:

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

	Less Than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact	

XIII. 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"/>

XIV. 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"/>
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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"/>
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XV. TRANSPORTATION/TRAFFIC -- Would the project:

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"/>
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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"/>
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c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

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

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

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

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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"/>

XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVII. MANDATORY FINDINGS OF SIGNIFICANCE –

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<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)?

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

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) 654-5266
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*Flex your power!
Be energy efficient!*

January 14, 2005

**TITLE VI
POLICY STATEMENT**

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

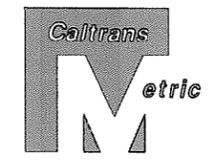
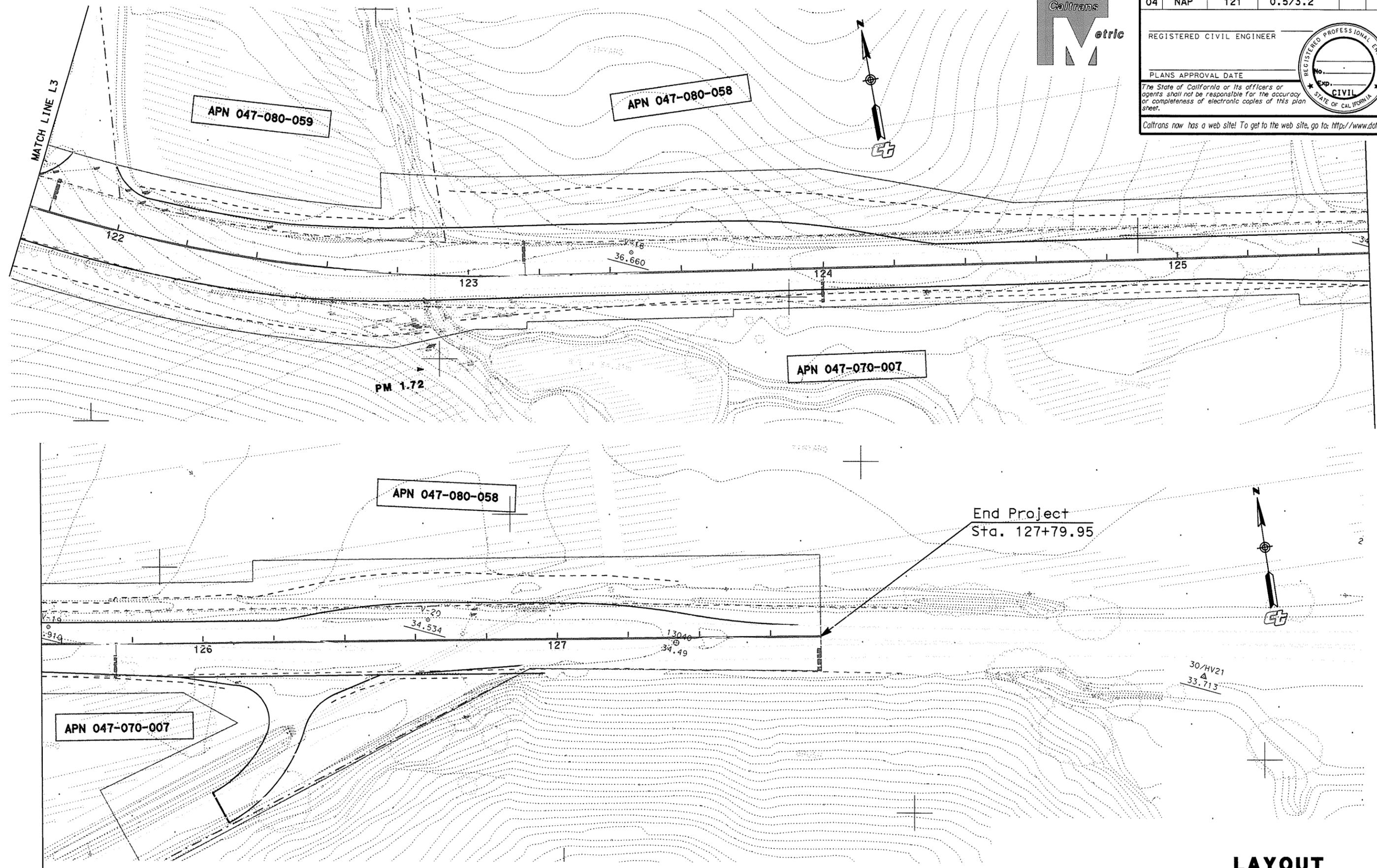

WILL KEMPTON
Director

Appendix C Layout Plans

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT
 PROJECT ENGINEER
 M. NGUYEN

CALCULATED/
 DESIGNED BY
 CHECKED BY

DATE
 REVISED BY
 DATE REVISED



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	NAP	121	0.5/3.2		

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

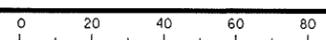
Caltrans now has a web site! To get to the web site, go to: <http://www.dot.ca.gov>



LAYOUT
 SCALE: 1:500

L-4

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



USERNAME => mnguyen3
 DGN FILE => L4.dgn

CU 04 231

EA 444200

LAST REVISION DATE PLOTTED => 25-APR-2005