

Sherwood Road Geometric Upgrades Project

Willits, Mendocino County
01-Men-101 (PM 47.2 / 47.3)
EA 26204

Draft Initial Study with Proposed Negative Declaration



Prepared by the
State of California Department of Transportation

June 2014



General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts for the proposed project located in Mendocino County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this document.
- Additional copies of this document and related technical studies are available for review at the Caltrans District 3 Sacramento Office (2379 Gateway Oaks Dr, Suite 150, Sacramento, CA 95833, (916) 274-0586) and the Willits Branch Library (390 E. Commercial St., Willits, CA 95490). A copy is also available via email; contact ken_lastufka@dot.ca.gov.
- Attend the public hearing.
- We'd like to hear what you think. If you have any comments about the proposed project, please attend the public workshop at the Willits Community Center, 111 E. Commercial St., Willits, on July 30, 2014 and/or send your written comments to the Department by the deadline.
- Send comments to:
Kendall Schinke, Environmental Branch Chief
Department of Transportation, Environmental Planning
2379 Gateway Oaks Drive, Suite 150, CA 95833
- Send comments via email to: kendall_schinke@dot.ca.gov.
- Be sure to send comments by the deadline: August 8, 2014

What happens next?

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

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Kendall Schinke, Office of Environmental Management, 2379 Gateway Oaks Dr, Suite 150, Sacramento, CA 95833-93401; (916) 274-0610 Voice, or use the California Relay Service by dialing 711, or (800) 735-2929 (TTY to Voice) or (800) 735-2922 (Voice to TTY).

SCH Number:
01-Men-101-PM 47.2 / 47.3
EA 26204

Sherwood Road Geometric Upgrades Project
01-Men-101 (PM 47.2 / 47.3)
EA 26204

DRAFT INITIAL STUDY with Proposed Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

6/30/2014

Date of Approval



John D. Webb, Chief
North Region Environmental Services
California Department of Transportation
CEQA Lead Agency

Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to realign the existing Sherwood Road intersection with U.S. 101 in Willits. Currently, Sherwood Road intersects U.S. 101 at a severe horizontal angle with a 12% grade, with two 12 foot lanes, no shoulders, and short left and right turn pockets. This design affects traffic flow at the intersection during peak traffic hours. The proposed project will re-align Sherwood Road to intersect U.S. 101 perpendicularly, add 4-foot-wide shoulders, include a retaining wall along the west side of the new road, reduce the grade on Sherwood Road to 10%, increase the length of the left and right turns on Sherwood Road from about 15 feet to 200 feet, and improve the signalized intersection with Americans with Disabilities Act (ADA) compliance. The acquisition of new State right of way will be required (approximately 0.55 acres).

Determination

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an ND for this project. This does not mean that Caltrans' decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public. Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine 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: Agricultural Resources, Cultural Resources, Geology/Soils, Land Use/Planning, Mineral Resources, Population/Housing, Public Services, Recreation, Transportation/Traffic, and Utilities/Service Systems.
- In addition, the proposed project would have less than significant effects on Aesthetics, Air Quality, Biology, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise because the following avoidance and minimization measures would reduce potential effects to insignificance:
 - Aesthetics:
 - Hydro-seed and restore all areas disturbed (including all staging areas) to its natural condition.
 - The proposed retaining wall will be a soil nail wall consisting of shotcrete. The shotcrete will be colored to match the earth tones of the surrounding environment.
 - Determine and delineate erosion control measures on the construction documents.
 - Replant container shrubs and trees to reestablish the landscape that has been removed.
 - Remove the old Sherwood Road alignment and re-vegetate with native grasses, shrubs and trees.
 - Air Quality:
 - Include Caltrans Standard Specifications Section 7-1.02C "Emission Reduction" and Section 14-9.03 "Dust Control," to the bid package to reduce and control emission impacts during construction. Also include 14-9.02 "Air Pollution Control," requiring the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.
 - Biology:
 - Establish environmentally sensitive areas, use containment measures/construction site best management practices (BMPs), restrict timing of woody vegetation removal, conduct nesting bird surveys prior to construction, limit vegetation removal, and incorporate weed free erosion control treatments.
 - As a component of the Willits Bypass project, approximately 43.20 acres of upland oak woodland have been placed under permanent preservation to mitigate for the loss of 7.71 acres of upland oak impacts. Considering that the proposed project would not have occurred "but for" the construction of the Willits Bypass, the additional 0.46 acre of upland oak woodlands affected by the construction of the Sherwood Road intersection upgrade will be compensated by the upland oak woodland mitigation proposed for the Willits Bypass project.
 - Hazards and Hazardous Materials:
 - Test removed traffic markings for levels of lead and chromium to determine proper disposal methods.

- Test for asbestos, heavy metal contamination and ADL as appropriate.
 - Evaluate any acquired new right of way for potential soil contamination.
 - A Hazardous Substances Disclosure Document (HSDD) attached to the Certificate of Sufficiency (COS) would be required before acquiring new right of way.
 - Include the following Standard Special Provisions into the final plans, specifications, and estimates: SSP 15-305 (yellow thermoplastic/paint striping removal), SSP 15-301 (white thermoplastic/paint removal), SSP 14-001 (yellow paint/thermoplastic removal), and SSP 7-1.02K(6)(i)(iii) (earth material containing lead).
 - Regarding soil and/or groundwater potentially containing petroleum hydrocarbon (TPH), removal of the petroleum contaminated material is required
- Hydrology and Water Quality:
 - Incorporate appropriate pollution prevention BMPs. Comply with standard requirements of the Caltrans Statewide National Pollution Discharge Elimination System (NPDES) permit and Construction General Permit.
 - Noise:
 - Include Caltrans Standard Specification, Section 14-8.02 "Noise Control" in the bid package. Noise will not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m. Also, the contractor will not be allowed to operate an internal combustion engine on the job site without the appropriate manufacturer-recommended muffler.
 - Traffic/Transportation
 - Prepare a detailed Traffic Management Plan that includes
 - Restrictions on when lanes may be closed to minimize effects during planned events.
 - A public awareness campaign.
 - Working with emergency services to reduce delays during construction.
 - Paid advertising in local newspapers prior to major stage or traffic shifts.
 - A Construction Zone Enhanced Enforcement Program (COZEEP) with the CHP during major construction that affects traffic, such as stage changes and traffic shifts.
 - Changeable message sign to alert motorists to unusual or new conditions and any delays that develop.
 - Prepare a detailed Stage Construction Plan that will carry out the construction phase of the project with as little impact as is possible to the traveling public.

John Webb, Chief
 North Region Environmental Services
 California Department of Transportation

Date

Initial Study

Project Title

Sherwood Road Geometric Upgrades Project

Lead Agency Name, Address and Contact Person

California Department of Transportation (Caltrans)
2379 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833
Kendall Schinke, Environmental Branch Chief
(916) 274-0610

Project Location

The project is located along U.S. 101 in the city of Willits in Mendocino County, CA., post mile 47.2/47.3 (see Figure 1).

Project Sponsor's Name and Address

California Department of Transportation (Caltrans)
2379 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833

Purpose and Need

The purpose of this project is to improve the existing non-standard Sherwood Road/U.S. 101 intersection. As part of the January 25, 2012 Relinquishment Agreement between the State of California (Caltrans) and the City of Willits, Caltrans has agreed to study the feasibility of developing and constructing a Sherwood Road/U.S. 101 intersection improvement project. This project includes the construction of a retaining wall approximately 30 feet tall that allows for an improved standard geometric design of the Sherwood Road approach and intersection with U.S. 101.

The project is needed to fulfill the requirements of the January 25, 2012 Relinquishment Agreement. The existing Sherwood Road intersects US 101 at a severe horizontal angle with a 12% grade, with two 12 foot lanes, no shoulders, and short left and right turn pockets. Left turn queues from northbound US 101 onto Sherwood Road and peak hour queues along the uphill gradient are long since this is the only access into the Brooktrails subdivision and to the Willits Municipal Airport. This project improves the operation of the intersection.

The 2013 peak hour traffic volumes at the Sherwood Road / U.S. 101 intersection are as follows:

South of the Intersection:

Northbound U.S. 101: 285

Southbound U.S. 101: 278

North of the Intersection

Northbound U.S. 101: 330

Southbound U.S. 101: 210

West of the Intersection

Westbound Sherwood Road: 410

Eastbound Sherwood Road: 255

Description of Project

This project involves realigning the existing Sherwood Road intersection with U.S. 101 in Willits from PM 47.1- 47.2 (Figure 1). Currently, Sherwood Road intersects U.S. 101 at a severe horizontal angle with a 12% grade, with two 12 foot lanes, no shoulders, and short left and right turn pockets. This design affects traffic flow at the intersection during peak traffic. The proposed project will re-align Sherwood Road to intersect U.S. 101 perpendicularly, add 4-foot-wide shoulders, include a retaining wall along the west side of the new road, reduce the grade on Sherwood Road to 10%, increase the length of the left and right turns on Sherwood Road from about 15 feet to 200 feet, and improve the signalized intersection with Americans with Disabilities Act (ADA) compliance. The acquisition of new State right of way will be required (approximately 0.55 acres).

Caltrans anticipates that there will be an excess of material that will require disposal. This material will be disposed of in the Willits Bypass Phase 2 footprint on the south side of Center Valley Road. This area was environmentally cleared as part of the Willits Bypass project.

Surrounding Land Uses and Setting

Land uses along U.S. 101 include commercial and a school. Land uses along Sherwood Road include rural residential and open space.

Permits and Approvals Needed

None.

Zoning

Residential, commercial.

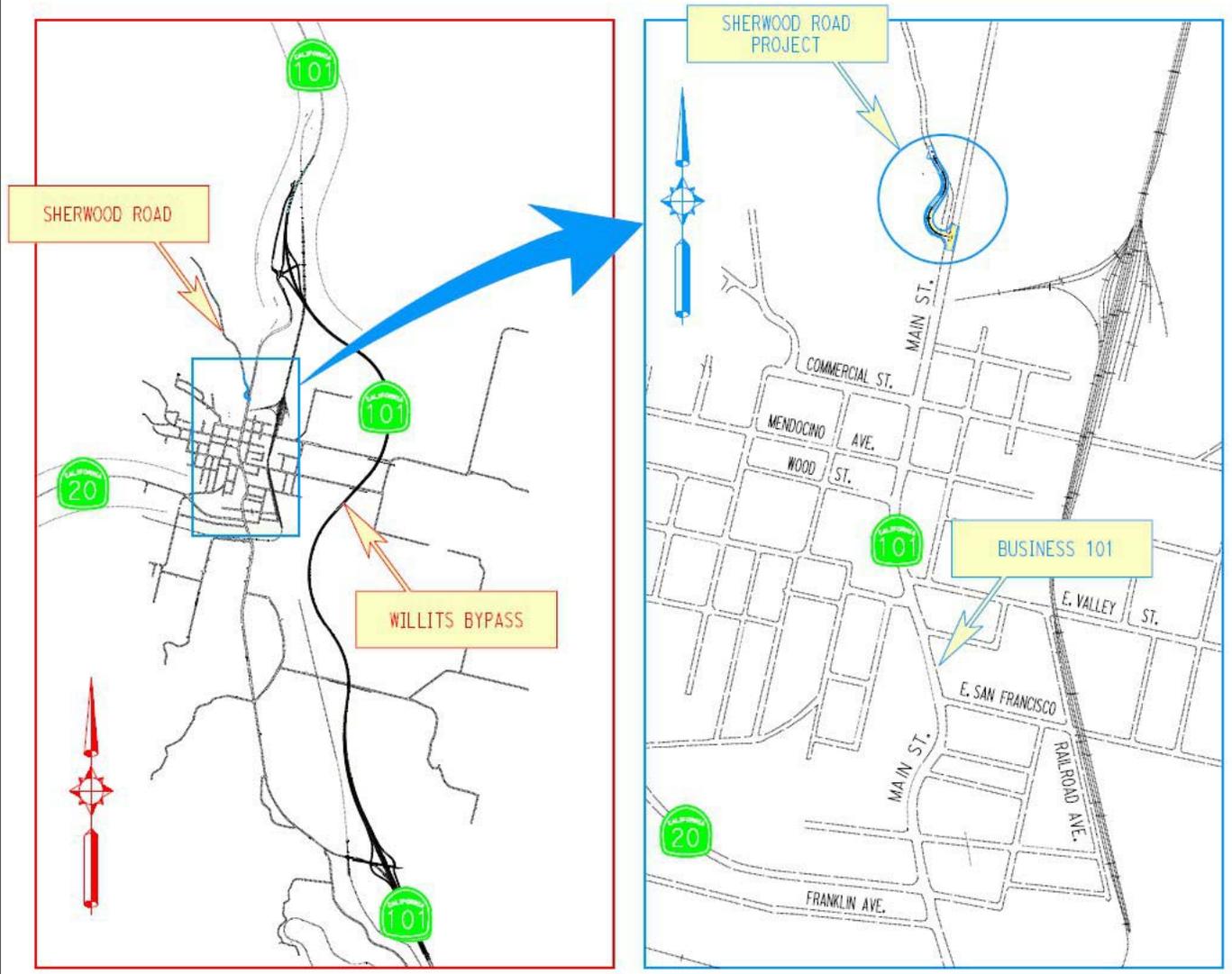


Figure 1
Project Location

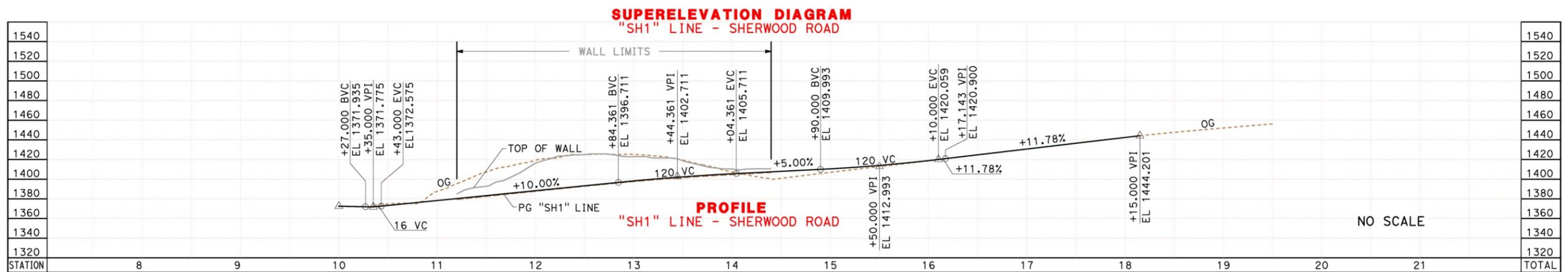
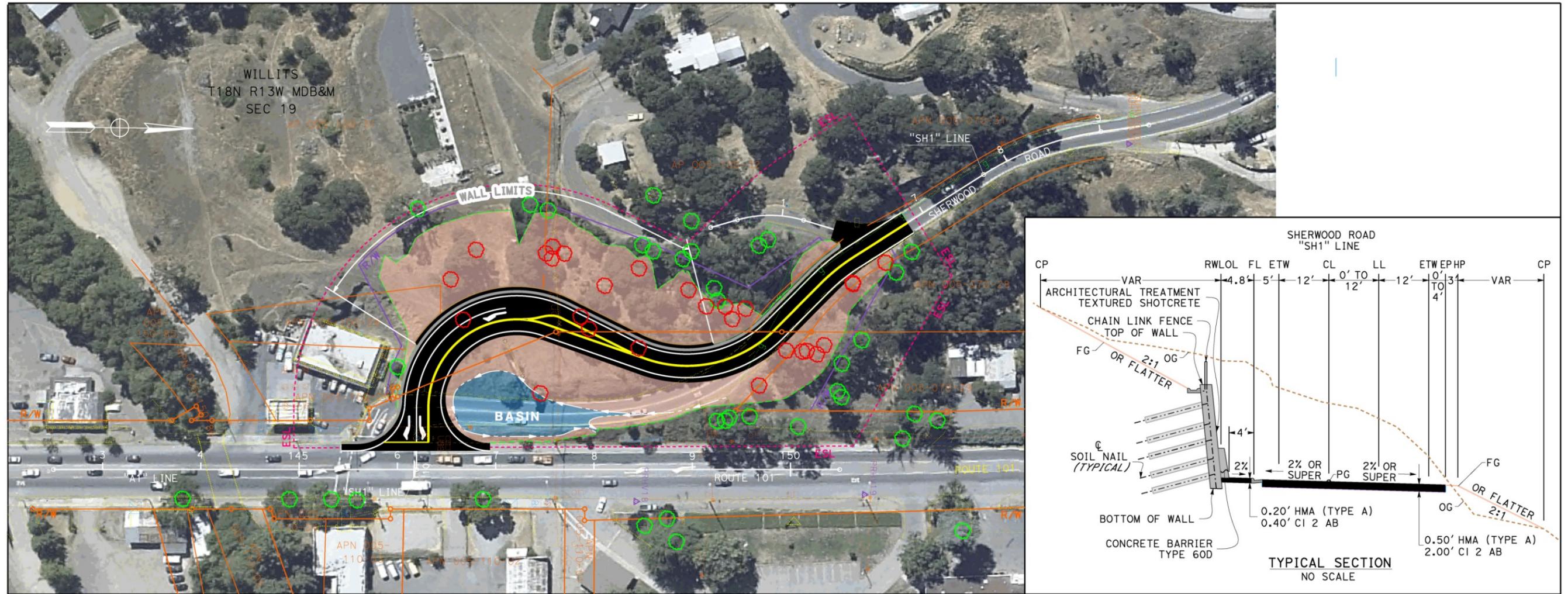


Figure 2
Project Features

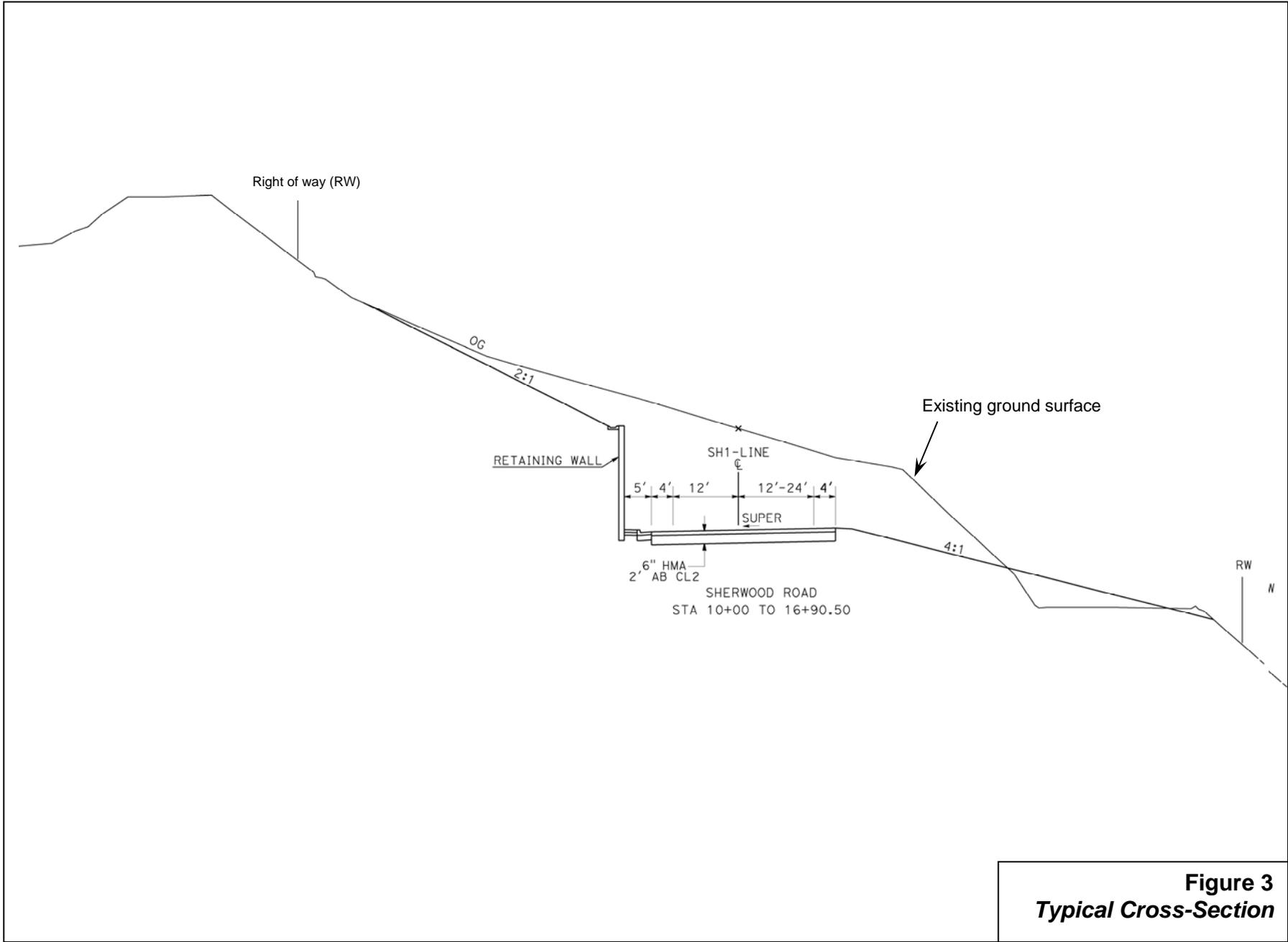


Figure 3
Typical Cross-Section

Impacts Checklist

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

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of hazardous waste issues relating to this project.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

V. CULTURAL RESOURCES: Would the project:

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

VI. GEOLOGY AND SOILS: Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

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

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

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

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

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

IX. HYDROLOGY AND WATER QUALITY: Would the project:

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

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

X. LAND USE AND PLANNING: Would the project:

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

XI. MINERAL RESOURCES: Would the project:

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

XII. NOISE: Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

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

XIII. POPULATION AND HOUSING: Would the project:

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

XIV. PUBLIC SERVICES:

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

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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XV. RECREATION:

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

XVI. TRANSPORTATION/TRAFFIC: Would the project:

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

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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

Affected Environment, Environmental Consequences, and Avoidance/Minimization Measures

Aesthetic Resources

Caltrans completed a Visual Impact Study in July 2013.

Affected Environment

The visual environment is defined through location, physical setting, natural communities and urban development. Every landscape type has distinct visual characteristics defining the natural and visual environment.

The City of Willits is known as the “Heart of Mendocino County-Gateway to the Redwoods,” where one leaves the wine country and enters the Redwood forests to the north. The location of the proposed project is in the northern portion of Willits which is in the Little Lake Valley. This valley is surrounded by views of the foothills and mountains; the visual quality is pleasantly memorable.

Natural communities in the valley range from grassy wetlands on the north end to an oak woodland matrix with irregular patches of grasslands on higher grounds near the edge of the valley. There are also linear patterns of woodlands that follow man made riparian corridors and land ownership boundaries. This is most noticeable near the northern wetlands. The uplands surrounding the valley provide the viewer with a more forested vista with oak woodlands being the dominant vegetation. Smaller patches of true forest grow on the more shaded slopes.

The immediate area surrounding the proposed project is urbanized with commercial and residential development. The natural communities in this area have been compromised, which has diminished the visual quality. The east side of US 101 is flat with predominantly commercial and retail properties. The west side of the highway, where Sherwood Road will be realigned, begins to ascend in elevation to upland vegetation consisting of natural grasslands and large groves of oak woodlands interspersed with residential development.

Environmental Consequences

The proposed project will have an impact to the visual quality of the area due to the changes in the environment caused by construction. A large amount of established trees and vegetation will be removed from the hillside west of the existing Sherwood Road in order to allow for the new roadway alignment. These trees are a visual resource of the area and, removing them will expose the hillside and potentially open up views of the residences that are presently screened.

This new alignment will cut into the slope requiring the construction of a retaining wall. The wall will be a soil nail wall consisting of shotcrete. Soil nailing is an earth retention technique using grouted tension-resisting steel elements (nails) that can be design for permanent or temporary support. Shotcrete is concrete conveyed through a hose and pneumatically projected at high velocity onto a surface. The shotcrete will be colored to match the earth tones of the surrounding environment. This will help lessen the impact of the structure. The wall be about 50 feet tall in the center, tapering down to 0 feet tall at the ends; overall the wall will be 150 feet long. This wall will be visible to the traveling motorist along Sherwood Road. The structure will introduce a manmade structure to an area that is presently natural in character and will, therefore, produce a more urban look

These changes will be minimized by implementing the measures discussed below.

Avoidance and Minimization Measures

The minimization of the impacts caused by this project can be achieved by implementing the following measures:

- Hydro-seed and restore all areas disturbed (including all staging areas) to its natural condition upon completion of the project. This can best be accomplished by re-contouring areas (especially the area of the cut slope) and applying permanent erosion control.
- Color the shotcrete used for the soil nail retaining wall with a shade that represents the shade of the natural cut slope (shades of brown and/or earth tones). This will help to blend the wall with the surrounding natural environment. The wall, in addition to the added color, should be finished to resemble a textured natural looking slope.
- Determine, and delineate, all permanent erosion control measures on the construction documents during the design phase of the project. This work shall be under the guidance of a landscape architect.
- Replace all mature trees and shrubs removed from the slope to reestablish the landscape that has been removed. Replacement ratios will be determined by the Caltrans landscape architect.
- Remove the old Sherwood Road (including the road rock sub-base) and re-vegetate with native grasses, shrubs and trees. The work to restore this area will be determined by the Caltrans landscape architect.

Biological Resources

The focus of this section is on biological communities, not individual plant or animal species. Caltrans completed a Natural Environment Study in October 2013.

Affected Environment

Willits and the Little Lake Valley lie within the northern Coast Range of California. The area ranges in elevation from approximately 1,440 feet at the southeast end of Little Lake Valley down to approximately 1,320 feet at the northeast end of the valley (Willits USGS 7.5-Minute Quadrangle).

The following vegetation communities and land uses have been recorded within or adjacent to the project: upland annual grasslands, upland oak, and ruderal.

All waters within the project are contained within the Little Lake Valley Basin and are therefore tributary to the Eel River watershed via Outlet Creek, a major tributary to the Eel River. The Eel River is considered as a “Traditionally Navigable Water” and a “Reasonably Permanent Water.” The Little Lake Valley is part of the Outlet Creek Hydrologic Shed Area (HSA), which encompasses approximately 422 sq km (163 sq mi), and the Outlet Creek HSA is within the Eel River Hydrologic Unit which encompasses approximately 9,300 sq km (3,614 sq mi). The Eel River flows northwest and discharges into the Pacific Ocean.

Sensitive Biological Resources Considered

In order to comply with the provisions of various state and federal environmental statutes and executive orders, the potential impacts to natural resources of the project area were investigated and documented. The project site was reviewed to 1) identify habitat types; 2) identify potential wetlands; 3) identify factors indicating the potential for rare species; 4) identify rare species present; 5) identify potentially sensitive water quality receptors and 6) identify potential problems for the study.

Sensitive Habitats Considered:

Jurisdictional Waters of the United States, including Wetlands

The project area was surveyed to determine if jurisdictional waters of the United States, including wetlands, were present within the environmental study limits (ESL). A positive determination for jurisdictional wetlands in the project area would be made based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. No areas meeting this three-parameter determination were located in the ESL.

The position of the ordinary high water mark (OHWM) delineates the limits of the United States Army Corps of Engineers' (USACE) jurisdiction at "other waters of the United States (OWUS; ephemeral, intermittent, and perennial drainages) within the project area. No areas qualifying as OWUS were located in ESL.

Oak Woodlands

The project area was surveyed to determine if oak woodlands were present within the ESL. Upland oak woodland was determined to be present within the ESL.

Sensitive Plant and Animal Species Considered:

A list of species and habitats potentially occurring within the project vicinity was developed in June 2014 based on information compiled from the United States Fish & Wildlife Service (USFWS) lists, California Department of Fish & Wildlife (CDFW) California Natural Diversity Database ("CNDDDB" Rarefind, 2012 Willits 7.5-minute USGS quadrangle), the California Native Plant Society ("CNPS" Electronic Inventory, accessed in July 2013), and from the current literature. Attachment A includes copies of these lists.

Environmental Consequences

Plant and Animal Species

Due to the project area being outside the range of the species, the lack of suitable habitat or habitat components in the project area, the lack of detection during recent Caltrans surveys or because the project would not harm individuals or alter the species' habitat, the proposed project will have "no affect" on Federally or State listed species, California species of concern, or sensitive plant or animal species tracked by the CNDDDB.

Jurisdictional Waters of the United States, including Wetlands

Because the ESL of the proposed project does not contain jurisdictional wetlands, OWUS or waters of the State of California, and because the project has been designed to avoid discharges, including excavation and/or fill activities, into jurisdictional resources, the proposed project will have no direct or indirect effects on jurisdictional wetlands and other waters of the United States or jurisdictional waters of the State of California.

Oak woodlands

Construction of the project is expected to remove approximately 0.46 acres of native upland oak woodland. This impact will be included with the upland oak woodland mitigation proposed for the Willits Bypass project (see the last measure, below).

Avoidance and Minimization Measures

The following measures will reduce impacts to biological resources.

- Oak woodlands will be avoided or minimized by designating these areas outside of the construction impact area as "Environmentally Sensitive Areas" (ESAs) on project plans and in project specifications. Specifically, ESAs for this project are intended to provide protection for native oak trees

that are not intended to be removed by the project. ESA provisions may include, but are not necessarily limited to, the use of temporary orange fencing to identify the proposed limit of work in areas adjacent sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into ESAs will be prohibited (including the staging/operation of heavy equipment or casting of excavated materials). ESA provisions will be implemented as a first order of work and remain in place until all construction activities are complete.

- Measures will be employed to prevent any construction material or debris from entering surface waters or their channels. Best management practices (BMPs) for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters. BMPs include but are not limited to:
 1. Where working areas encroach on live or dry streams, lakes, or wetlands, North Coast Regional Water Quality Control Board (NCRWQCB)-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems shall be constructed and maintained between working areas and streams, lakes, and wetlands. During construction of the barriers, discharge of sediment into streams shall be held to a minimum. Discharge will be contained through the use of NCRWQCB-approved measures that will keep sediment from entering protected waters.
 2. Oily or greasy substances originating from the Contractor's operations shall not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland. Appropriate BMPs will be determined by Caltrans and/or the contractor.
 3. Asphalt concrete shall not be allowed to enter a live or dry stream, pond, or wetland. Appropriate BMPs will be determined by Caltrans and/or the contractor.
- Removal of any woody vegetation (trees and shrubs) required for the project would be completed between September 1st and January 31st prior to project construction and outside of the predicted nesting season for raptors and migratory birds in this area. Vegetation removal outside this time period may not proceed until a survey by a qualified biologist determines no nests are present or in use (see below).
- If woody vegetation removal, construction, grading, or other project- related improvements are scheduled during the nesting season of protected raptors and migratory birds (February 1st to August 31st), a focused survey for active nests of such birds shall be conducted by a qualified biologist within 15 days prior to the beginning to project-related activities. If active nests are found, Caltrans shall consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and with CDFW to comply with provisions of the Fish and Game Code of California. If a lapse in project related work of thirty days or longer occurs, another survey and, if required, consultation with USFWS and CDFW will be required before the work can be reinitiated.
- Vegetation removal shall be limited to the absolute minimum amount required for construction.
- To minimize the risk of introducing additional non-native species into the area, only native plant species appropriate for the project area will be used in any erosion control or revegetation seed mix or stock. Certified weed-free straw shall be required where erosion control straw is to be used. In addition, any hydro-seed mulch used for revegetation activities must also be certified weed-free.
- As a component of the Willits Bypass project, approximately 43.20 acres of upland oak woodland have been placed under permanent preservation to mitigate for the loss of 7.71 acres of upland oak impacts. Construction of the project is expected to remove approximately 0.46 acres of native upland oak

woodland. This impact will be mitigated as part of the upland oak woodland mitigation proposed for the Willits Bypass project.

Hazardous Wastes

Caltrans completed an Initial Site Assessment in October 2013.

Affected Environment

Project work will include drainage improvements, lane modifications and retaining walls. Excess soil will be generated, and soil and vegetation disturbance will occur during construction and staging. The acquisition of new right of way will be required. This project contains portion of, and will impact, a "Cortese" listed site (Towermart #166, 180 Main Street, Willits CA 95490).

Environmental Consequences

Three minor potential hazardous waste/material issues were identified: the removal of thermoplastic/paint striping, the disturbance of soil containing aerially deposited lead soil (ADL) and the disturbance of soil and/or groundwater potentially containing petroleum hydrocarbons (TPH) from underground storage tanks.

Avoidance and Minimization Measures

With the implementation of the following avoidance and minimization measures, adverse affects due to hazardous waste are no anticipated:

- Test removed traffic markings for levels of lead and chromium to determine proper disposal methods.
- Test for asbestos, heavy metal contamination and ADL as appropriate.
- Evaluate any acquired new right of way for potential soil contamination.
- A Hazardous Substances Disclosure Document (HSDD) attached to the Certificate of Sufficiency (COS) would be required before acquiring new right of way.

To address these potential hazardous waste/material issues, the following Standard Special Provisions (SSP) are required:

SSP 15-305 (yellow thermoplastic/paint striping removal)
SSP 15-301 (white thermoplastic/paint removal)
SSP 14-001 (yellow paint/thermoplastic removal)
SSP 7-1.02K(6)(i)(iii) (earth material containing lead)

These provisions will be included in the final plans, specifications, and estimate (PS&E).

Further, to address TPH, the removal of any petroleum contaminated material is required, as described on the Caltrans Hazardous Waste Management website (www.dot.ca.gov/hq/env/haz/).

Hydrology and Water Quality

Caltrans completed a Water Quality Assessment Report in December 2013.

Affected Environment

Hydrology

The project is located adjacent to Mill Creek (also known as Willits Creek) in Mendocino County. It is situated in the Outlet Creek Hydrologic Sub-Area (HSA) No. 111.61 in the Upper Main Eel River Hydrologic Area in Eel River Hydrologic Unit. The project is located in the Mill Creek watershed. Average annual precipitation in the project area is 53.7 inches.

Mill Creek and the other drainages within Mill Creek watershed discharge into Outlet Creek, which is a tributary to the Eel River. The major receiving water body (Eel River) is listed as impaired for sedimentation/siltation and temperature pursuant to Section 303(d) of the Clean Water Act (SWRCB 2010). These constituents are typically associated with construction activities, agriculture, erosion, streambank modification, removal of riparian vegetation, channelization, and non-point sources. Total Maximum Daily Loads (TMDLs) for sedimentation/siltation and temperature have been developed and approved by the U.S. Environmental Protection Agency (USEPA) and adopted for the Eel River by the NCRWQCB.

Surface Water Quality Objectives/Standards and Beneficial Uses

Narrative and numeric water quality objectives (WQOs) for all surface waters within the North Coast Region are established for coliform bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating materials, oil and grease, pesticides, pH, radioactivity, sediment, settleable materials, suspended materials, taste and odor, temperature, toxicity, and turbidity. WQOs for surface waters within the Outlet Creek HSA are established for specific conductance, total dissolved solids, dissolved oxygen, and pH. Refer to the North Coast Region Basin Plan (NCRWQCB 2011) for the specific WQO limitations. The beneficial uses designated for the Outlet Creek HSA are as follows:

- MUN: Municipal and Domestic Supply
- AGR: Agricultural Supply
- IND: Industrial Service Supply
- GWR: Groundwater Recharge
- NAV: Navigation
- REC-1: Water Contact Recreation
- REC-2: Noncontact Water Recreation
- COMM: Commercial and Sportfishing
- WARM: Warm Freshwater Habitat
- COLD: Cold Freshwater Habitat
- WILD: Wildlife Habitat
- RARE: Preservation of Rare and Endangered Species
- MIGR: Migration of Aquatic Organisms
- SPWN: Spawning, Reproduction, and Development
- AQUA: Aquaculture

Groundwater Quality Objectives/Standards and Beneficial Uses

The proposed project site is entirely underlain by the Eel River Valley groundwater basin. The potential beneficial uses of the underlying groundwater within the North Coast Region include municipal supply, agricultural supply, and industrial service supply. All groundwaters are subject to narrative and quantitative

WQOs for bacteria, chemical constituents, radioactivity, and tastes and odors, as described in the North Coast Basin Plan. Impacts to groundwater are not anticipated to occur as a result of the proposed project.

Disturbed Soil Area

At this time, the exact disturbed area at the road realignment/intersection improvement project location is unknown. It may be necessary to update the Water Quality Assessment Report when the disturbed area information becomes available.

Environmental Consequences

There is the potential for temporary water quality impacts to occur during the intersection improvement activities due to work adjacent to Mill Creek. Tree and vegetation removal from the hillside west of the existing Sherwood Road would be necessary to allow for the new roadway alignment. Without implementation of best management practices (BMPs), construction activities associated with the proposed road realignment have the potential to impact water quality through the release of pollutants such as sediment, soil stabilization residues, oil and grease, trash and debris, and metals. Any type of soil disturbance would expose soil to erosion from wind and water that could result in sedimentation to receiving surface waters. Permanent water quality impacts may also occur as a result of the increase in impervious surface and potential for increased runoff velocity and volume. The increase in impervious surface is not known at this time; however, pollutants typically generated from transportation-related projects include sediment/turbidity, nutrients, organic compounds, trash and debris, oxygen-demanding substances, oil and grease, and metals.

Avoidance and Minimization Measures

To prevent potential pollution to receiving waters as a result of construction activities and/or operations related to this project, pollution prevention BMPs would be incorporated into the project specifications. Compliance with the standard requirements of the Caltrans Statewide National Pollution Discharge Elimination System (NPDES) permit and Construction General Permit would be required to minimize potential short-term construction-related and permanent impacts. The minimum anticipated temporary BMP measures for this project are described below.

1. The Eel River TMDL for sedimentation is in effect, which requires sediment-control BMPs to avoid further impairment. Anticipated temporary sediment and erosion control measures for this project include the following:
 - Silt fence
 - Fiber rolls
 - Sandbag barrier
 - Gravel bag berm
 - Rolled erosion-control product (e.g., netting)
2. Specific pollution prevention measures would be implemented for the project to help minimize pollution in storm water runoff, including preservation of existing vegetation as much as possible, slope/surface protection systems (permanent soil stabilization), and designated outdoor material storage areas.
3. The project would be regulated by North Coast RWQCB through Caltrans Statewide NPDES Permit (Order No. 2012-0011-DWQ). Caltrans would implement the programs specified in its approved Storm Water Management Plan to minimize potential temporary and permanent impacts.
4. If the total disturbed soil area is equal to or greater than 1 acre, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented in accordance with the Construction General Permit to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP would identify the sources of pollutants that may affect the quality of storm water;

include construction site BMPs to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management and non-storm-water BMPs, and include routine inspections and a monitoring and reporting plan.

5. All construction site BMPs would follow the latest edition of the Storm Water Quality Handbook: Construction Site Best Management Practices Manual to control and minimize the impacts of construction-related activities, materials, and pollutants on the watershed.
6. The project would comply with Caltrans Standard Specifications for Water Pollution Control and Job Site Management (Caltrans 2010). The project would implement storm water and water pollution control training, routine BMP inspections, spill prevention and control, materials and waste management, and non-storm water management. Caltrans' Standard Specifications require the Contractor to submit a Water Pollution Control Plan if the disturbed soil area is less than one acre. This plan would meet the standards and objectives to minimize water pollution impacts set forth in section 7-1.01G of Caltrans' Standard Specifications. The Water Pollution Control Plan would also be in compliance with the goals and restrictions identified in the North Coast Basin Plan.

By implementing the BMPs as described above and in compliance with applicable permits and regulations, the Sherwood Road realignment/intersection improvement project would meet federal, state, and local storm water management and water quality protection regulations by minimizing the potential for pollutant transport.

Cultural Resources

Avoidance and/or Minimization Measures

No cultural resources were identified for the project.

If cultural materials (e.g., bones, stone implements, old bottles, etc.) are encountered during the project construction, Caltrans policy requires that all work in the area (within a 60 meter [200 feet] radius) must immediately halt until a qualified archaeologist can evaluate the nature and significance of the material and determine an appropriate course of action in consultation with the State Historic Preservation Office (Stipulation XV, Post Review Discoveries, Section B.1-3 in the Section 106 PA).

If human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the location (within a 60 meter [200 feet] radius), or any nearby area reasonably suspected to overlie adjacent remains, until a qualified archaeologist has contacted the appropriate county coroner and they have determined that the remains are not subject to provisions of Section 27491 of the Government Code. If the coroner determines the remains to be Native American, they shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will appoint a Most Likely Descendent for disposition of the remains (Health and Safety Code Sect. 7050.5, Public Resources Code Sect. 5097.24).

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels. Research from such establishments as the Intergovernmental Panel on Climate Change (IPCC) are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

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

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

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

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and pro-active approach to dealing with GHG emissions and climate change. Relevant legislation include the following policies:

- Assembly Bill 1493 (AB 1493), Pavley.
- Executive Order (EO) S-3-05: (signed on June 1, 2005, by former Governor Arnold Schwarzenegger)
- AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley
- Executive Order S-20-06: (signed on October 18, 2006 by former Governor Arnold Schwarzenegger)
- Executive Order S-01-07: (signed on January 18, 2007 by former Governor Arnold Schwarzenegger)
- Senate Bill 97 (SB 97) Chapter 185, 2007
- Caltrans Director's Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. This policy contributes to the Department's stewardship goal to preserve and enhance California's resources and assets.

Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has promulgated explicit guidance or methodology to conduct project-level GHG analysis. As stated on FHWA's climate change website (<http://www.fhwa.dot.gov/hep/climate/index.htm>), climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Despite the lack of Federal GHG regulations and legislation, FHWA as well as the National Highway Traffic Safety Administration (NHTSA) and U.S. EPA are taking steps to lessen climate change impacts by improving transportation system efficiency, creating cleaner fuels, reducing the growth of vehicle hours travelled, and enabling the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines.

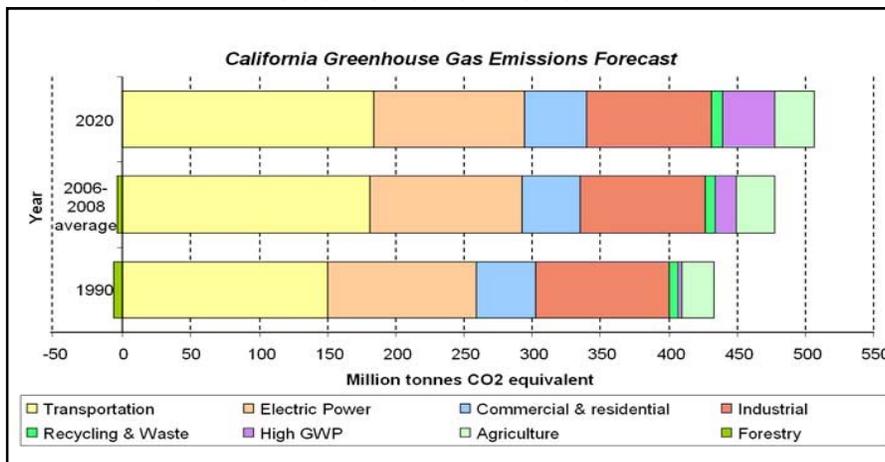
¹ http://climatechange.transportation.org/ghg_mitigation/

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.² In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

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

California GREENHOUSE GAS FORECAST



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

Caltrans and its parent agency, the California State Transportation Agency (CalSTA), have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.³

² This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

³ Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

This project involves realigning the existing Sherwood Road intersection with U.S. 101 in Willits from PM 47.1- 47.2. Currently, Sherwood Road intersects US 101 at a severe horizontal angle with a 12% grade, with two 12 foot lanes, no shoulders, and short left and right turn pockets. The proposed project will re-align Sherwood Road to intersect U.S. 101 perpendicularly, add 4-foot shoulders, include a retaining wall along the west side of the new road, reduce the grade to 10%, increase the length of the left and right turns from about 15 feet to 200 feet, and improve the signalized intersection with Americans with Disabilities Act (ADA) compliance. The project improves improve access between Sherwood Road and U.S. 101, and improves the operation of the intersection.

The operation of this project would result in low-to-no potential for an increase in GHG emissions.

Construction Emissions

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

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

CEQA Conclusion

Although construction emissions are unavoidable and are expected to be minimal, the proposed project will not increase capacity and is not expected to result in additional operational CO₂ emissions. However, it is Caltrans determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding significance of the project's direct impact and its contribution on the cumulative scale to climate change. However, Caltrans is firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)⁴.

Greenhouse Gas Mitigation

AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year.

⁴ http://climatechange.transportation.org/ghg_mitigation/

The following measures will be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

1. Landscaping reduces surface warming, and through photosynthesis, decreases CO₂. The project proposes planting in the slopes and drainage improvements. Caltrans has committed to replace all removed trees based on replacement recommendations provided by the Caltrans landscape architect. These trees will help offset any potential CO₂ emissions increase. Based on a formula from the Canadian Tree Foundation⁵, it is anticipated that the planted trees will offset between 7-10 tons of CO₂ per year.
2. According to Caltrans' Standard Specifications, the contractor must comply with all of rules, ordinances, and regulations regarding to air quality restrictions.
3. Compliance with Title 13, California Code of Regulations §2449(d)(3)—Adopted by the Air Resources Board on June 15, 2008, this regulation would restrict idling of construction vehicles to no longer than 5 consecutive minutes. The Contractor must comply with this regulation in order to reduce harmful emissions from diesel-powered construction vehicles.

Adaptation Strategies

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

Interim guidance has been released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise.

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

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

Construction Impacts

Discussion of construction impacts associated with air quality and noise are discussed below.

⁵ Canadian Tree Foundation at http://www.tcf-fca.ca/publications/pdf/english_reduceco2.pdf. For rural areas the formula is: # of trees/360 x survival rate = tonnes of carbon/year removed for each of 80 years.

Noise

Caltrans completed a technical noise memo in June 2013.

Affected Environment

This project is a Type III project and it is exempt from traffic noise impact analysis under Title 23, Part 772 of the Code of Federal Regulations (23CFR772). Therefore, noise abatement measures are not considered for this project.

Environmental Consequences

During construction, noise may be generated from the contractors' equipment and vehicles.

Avoidance and Minimization Measures

Caltrans requires the Contractor to conform to the provisions of Standard Specification, Section 14-8.02 "Noise Control": Do not exceed 86 dBA L_{Max} at 50 feet from the job site activities from 9 p.m. to 6 a.m. Also, the contractor will not operate an internal combustion engine on the job site without the appropriate manufacturer-recommended muffler.

Air Quality

Caltrans completed a technical air quality memo in June 2013.

Affected Environment

The project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) §93.126, subsection "Safety": no further analysis is required.

Environmental Consequences

The project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM₁₀, would be the primary short-term construction impact, which may be generated during excavation, grading and hauling activities. However, both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature.

Avoidance and Minimization Measures

Caltrans Standard Specifications Section 7-1.02C "Emission Reduction" and Section 14-9.03 "Dust Control," should effectively reduce and control emission impacts during construction. Provision 14-9.02 "Air Pollution Control" requires the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

Traffic/Transportation

This project may be combined with the Willits Relinquishment of U.S. 101 Project for the purpose of construction. A detailed Traffic Management Plan will be developed during the design phase of this project

whether or not it is combined with the relinquishment. Elements of Traffic Management Plan that will be considered include:

1. Restrictions on when lanes may be closed will be coordinated to provide road capacity during planned events.
2. A public awareness campaign.
3. Working with emergency services to reduce delays during construction.
4. Paid advertising in local newspapers prior to major stage or traffic shifts.
5. A Construction Zone Enhanced Enforcement Program (COZEEP) with the CHP during major construction that affects traffic, such as stage changes and traffic shifts.
6. Changeable message sign to alert motorists to unusual or new conditions and any delays that develop.

Stage Construction

A detailed Stage Construction Plan will be developed during the design phase of this project to carry out the construction phase of the project with as little impact as is possible to the traveling public.

List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Alex Arevalo, NPDES Coordinator; Contribution: Water Quality Assessment Report

Benjamin Barnes, Transportation Engineer; Contribution: Geology

Joan Fine, Associate Environmental Planner, Architectural Historian; Contribution: Cultural Resources Study

Kathleen Grady, Associate Landscape Architect; Contribution: Visual Impact Assessment (VIA)

Ken Lastufka, Associate Environmental Planner; Contribution: Environmental document preparation, Community Impact Assessment (CIA).

Jason Meigs, Associate Environmental Planner, Natural Resources; Contribution: Natural Environment Study (NES)

Mark Melani, Environmental Engineer (Hazardous Waste/Materials); Contribution: Initial Site Assessment (ISA)

Erick Wulf, Associate Environmental Planner, Archaeology; Contribution: Cultural Resources Study

Saied Zandian, Transportation Engineer (Noise Quality); Contribution: Noise Assessment

ATTACHMENT A

1. Listed/Proposed Threatened and Endangered Species for the WILLITS Quad (Candidates Included)
2. California Department of Fish and Game Natural Diversity Database Selected Elements by Scientific Name

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Listed/Proposed Threatened and Endangered Species for the WILLITS Quad (Candidates Included)

June 19, 2014

Document number: 422124235-161531

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KEY:

(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction

(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future

(E) Endangered Listed in the Federal Register as being in danger of extinction

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

(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated

* Denotes a species Listed by the National Marine Fisheries Service

Type	Scientific Name	Common Name	Category	Critical Habitat
Fish				
*	<i>Oncorhynchus kisutch</i>	S. OR/N. CA coho salmon	T	Y
*	<i>Oncorhynchus mykiss</i>	Central California coast steelhead	T	Y
*	<i>Oncorhynchus mykiss</i>	Northern California steelhead	T	Y
*	<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	T	Y
Birds				
	<i>Brachyramphus marmoratus</i>	marbled murrelet	T	Y
	<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	PT	N
	<i>Strix occidentalis caurina</i>	northern spotted owl	T	Y



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad is (Willits (3912343))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Alisma gramineum</i> grass alisma	PMALI01010	None	None	G5	S1S2	2B.2
<i>Arboremus pomo</i> Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
<i>Dendroica petechia brewsteri</i> yellow warbler	ABPBX03018	None	None	G5T3?	S2	SSC
<i>Gilia capitata ssp. pacifica</i> Pacific gilia	PDPLM040B6	None	None	G5T3T4	S2	1B.2
<i>Hesperolinon adenophyllum</i> glandular western flax	PDLIN01010	None	None	G3	S3	1B.2
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Limnanthes bakeri</i> Baker's meadowfoam	PDLIM02020	None	Rare	G1	S1	1B.1
<i>Martes pennanti</i> fisher - West Coast DPS	AMAJF01021	Candidate	Candidate Threatened	G5T2T3Q	S2S3	SSC
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Piperia candida</i> white-flowered rein orchid	PMORC1X050	None	None	G3?	S2	1B.2
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	PMPOA4Y070	None	Threatened	G2	S2	1B.1
<i>Potamogeton epihydrus</i> Nuttall's ribbon-leaved pondweed	PM POT03080	None	None	G5	S2S3	2B.2
<i>Valley Oak Woodland</i> Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 13