

Attachment D
Draft IS-MND

Green Valley Road/ Weber Creek Bridge
Replacement Project
(CIP #77114)

**Initial Study/
Mitigated Negative Declaration**

for the

**Green Valley Road Bridge (25C-088) at
Weber Creek Replacement Project**

July 2011

**El Dorado County
Department of Transportation
El Dorado County
2850 Fairlane Court
Placerville, CA 95667**

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PROJECT INFORMATION

- 1. Project Title:** Green Valley Road Bridge (25C-088) at Weber Creek Replacement
- 2. Lead Agency Name and Address:** El Dorado County Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
- 3. Contact Person and Phone Number:** Ms. Janet Postlewait, Principal Planner
(530) 621-5993
janet.postlewait@edcgov.us
- 4. Project Location:** The project is located approximately 0.6 miles west of Placerville in El Dorado County. The western edge of the approximately 7.68-ac project area is located along Green Valley Road approximately 0.2 mi east of the intersection with El Dorado Road. The eastern edge of the project area is located along Green Valley Road approximately 0.06 mi east of the intersection with Oak Knoll Road.

5. Description of Project:

El Dorado County, in conjunction with the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), is proposing to replace the Green Valley Road Bridge crossing Weber Creek. The existing bridge is a 20-ft-wide, two-lane, concrete tee beam structure that provides access to residential areas outside the City of Placerville. The bridge was constructed in 1926 and has been identified by Caltrans as structurally deficient (sufficiency rating of 22.5). The bridge also does not meet current standards of roadway width. The bridge must be replaced because it cannot be rehabilitated. Associated improvements for the approaches and bridge include an improved horizontal alignment with a larger radius curve, improved vertical alignment, wider lanes and shoulders, and retaining walls. The new bridge will be located to the west of the existing bridge, which will be removed after completion of the Project. A detailed project description follows in Section 3. The proposed Project is shown on Figure 2.

- 6. General plan designation:** El Dorado County right-of-way; Low-Density Residential (LDR)
- 7. Zoning:** El Dorado County right-of-way; Residential Estate (RE)

8. Surrounding Land Uses and Setting:

The Project area is located approximately 0.6 mi west of Placerville in El Dorado County. The surrounding area includes Weber Creek, which flows year round, and generally steep terrain within a low-density rural residential area. Green Valley Road is an east-west, rural, two-lane, regional road that

connects the communities of Coloma, Lotus, and Placerville on the western slope of El Dorado County. Green Valley Road Bridge crosses Weber Creek approximately 1,000 feet east of El Dorado Road and approximately 4,000 feet west of Placerville Drive.

9. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement):

The Project may require permits or approvals from the following:

- Caltrans — National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Army Corps of Engineers — Section 404 Clean Water Act Nationwide Permit
- Central Valley Regional Water Quality Control Board — Section 401 Water Quality Certification
- State Water Resources Control Board — Statewide General Permit for Discharges of Storm Water Associated with Construction Activity
- California Department of Fish and Game — Streambed Alteration Agreement
- El Dorado County Air Quality Management District — Fugitive Dust Plan Approval

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1. INTRODUCTION

The El Dorado County Department of Transportation (DOT) proposes to replace Green Valley Road Bridge (25C-0088) at Weber Creek with a larger, wider bridge. The existing bridge is a 20-ft-wide, two-lane, concrete tee beam structure that provides access to residential areas outside the City of Placerville (Figure 1). The existing bridge, constructed in 1926, has been identified by Caltrans as structurally deficient (sufficiency rating of 22.5). The existing bridge also does not meet current standards of roadway width. The bridge must be replaced because it cannot be rehabilitated. The purpose of the Project is to increase the sufficiency rating for the bridge to improve roadway safety.

El Dorado County is the local lead agency and prepared this Initial Study to consider the significance of potential project impacts pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). This Initial Study was prepared in accordance with the State CEQA Guidelines (14 California Administrative Code, Section 14000 et seq.).

Based on the results of this Initial Study, the County has determined that the Project would have less than significant impacts on the environment with the incorporation of mitigation measures. The County may approve the Project with the certification of a Mitigated Negative Declaration (MND).

The remainder of this document is organized into the following sections:

- **Section 2, Project Description**—Provides a detailed description of the proposed Project;
- **Section 3, Initial Study Checklist and Supporting Documentation**—Provides CEQA Initial Study Resource impact checklists and supporting documentation. Identifies the thresholds of significance, evaluates potential impacts, and describes mitigation necessary to reduce impact significance;
- **Section 4, Initial Study Findings**—Provides a determination of the County’s CEQA findings;
- **Section 5, Supporting Information Sources**—Identifies the personnel responsible for the preparation of this document and provides a list of the references cited throughout the document.

2. PROJECT DESCRIPTION

2.1. Location

The Project is located approximately 0.6 miles west of Placerville in El Dorado County. The western edge of the approximately 7.68-ac project area is located along Green Valley Road approximately 0.2 mi east of the intersection with El Dorado Road. The eastern edge of the project area is located along Green Valley Road approximately 0.06 mi east of the intersection with Oak Knoll Road. The existing bridge is a 20-ft-wide, two-lane, concrete, tee beam bridge. The Project occurs on the Placerville USGS topographic quad (T10N, R10E, Section 14; Figure 1). Figure 2 is an aerial view of the project area.

2.2. Project Purpose and Objectives

The purpose of the Project is to replace the structurally deficient bridge at Weber Creek with a new bridge that is designed in accordance with current standards. The objectives of the Project are to improve driver safety in the project area and to provide passage of 100-year flood events without overtopping. The project will improve driver safety by increasing the width of the bridge to accommodate shoulders and by increasing the site distances approaching the bridge by straightening the approach curves on Green Valley Road, both horizontally and vertically. This Project is identified in the El Dorado County Capital Improvement Program as project # 77114 (El Dorado County 2010).

2.3. Project Description

The County of El Dorado, in conjunction with the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), is proposing to replace the Green Valley Road Bridge at Weber Creek. The Green Valley Road Bridge (Bridge Number 25C-0088) at Weber Creek is a 20-foot-wide, two-lane, concrete “T” beam structure. Green Valley Road is one of three east-west arterials in the west slope area of El Dorado County, extending from the county line in El Dorado Hills to Placerville. The existing bridge, constructed in 1926, has been identified by Caltrans as structurally deficient (sufficiency rating of 22.5). The existing bridge also does not meet current standards of roadway width. The bridge must be replaced because it cannot be rehabilitated. Associated improvements for the approaches and bridge include an improved horizontal alignment with a larger radius curve, improved vertical alignment, wider lanes and shoulders, and retaining walls. The new bridge will be located to the west of the existing bridge, which will be removed after the new bridge is constructed. Figures 5-8 are the 30% plans for the proposed Project.

Alternatives analyzed were a No Project Alternative, a Replace-in-Place Alternative, a 35-mph design curve, and the Proposed Project. The Proposed Project design with associated impacts is shown on Figure 3. The project site is severely constrained due to the substantial vertical elevation change between the current bridge deck and the study limits, the wide ravine, the 90 degree turn at the south bridge approach, and safety for traffic circulation. Under the No-Project Alternative, Green Valley Road Bridge would remain in its current condition. The No-Project Alternative does not meet the County’s need for replacement of a structurally deficient bridge, nor improve roadway safety.

The Replace-in-Place Alternative would involve replacement of the existing Green Valley Road Bridge in the same location. This alternative would have the least impact on the riparian corridor. This alternative was rejected because it would not remove the existing sharp radius horizontal curve, nor would it allow a design speed that is compatible with the road classification. This alternative would require closure of the bridge for an extended period of time. For traffic circulation and safety, the road cannot be closed for more than six months.

A 35-mile per hour (mph) bridge design speed would shift the alignment further downstream, require a substantially larger bridge that might require center piers in Weber Creek, and increase the amount of ROW take on adjacent properties. This alternative would have greater impacts on the riparian corridor due to the larger footprint of the bridge.

The Proposed Project will be located downstream of the existing bridge. The bridge will be longer than the existing bridge in order to place the abutments outside the main creek bed. The new bridge deck will be approximately 11 ft higher than the existing bridge deck to provide adequate clearance to pass forecasted 100-year storm flows under the bridge without overtopping.

The redefined alignment will increase the safety on Green Valley Road. The proposed centerline alignment removes the sharp short radius horizontal curve and replaces it with a longer radius curve. A design speed of 25-mph was selected for this curve based upon the Green Valley Road alignment and road classification. The 25-mph design allows the existing bridge to remain in service during construction. This is an important design consideration.

The Proposed Project would require ROW acquisition, slope and drainage easements, drainage easements, public utilities easements, and temporary construction easements on neighboring residential properties. Required acquisitions and easements are listed below.

Table 1. Required ROW Acquisition and Easements

APN	ROW Acquisition	Slope and Drainage Easement	Drainage Easement	Public Utilities Easement	Temporary Construction Easement
32511026	X	X		X	
32511032	X		X		
32511033			X		
32511034	X		X	X	X
32511035	X		X	X	X
32511041	X			X	
32511047	X	X	X	X	X
32544023	X			X	
32545001	X		X	X	X
32545003	X			X	X
32545004	X		X	X	X

A revegetation and erosion control plan is included in the Natural Environment Study (NES; Sycamore Environmental 2010). The NES is a standard Caltrans format for describing the existing biological environment and how the project alternatives affect the environment. All native riparian trees in the white alder-Oregon ash riparian forest that are removed will be replaced at a 2:1 ratio. Willow and/or alder canes will be planted in the rock slope protection. Canyon live oaks will be planted in disturbed upland areas. A native grass erosion control seed mixture will be used for reseeding affected slopes.

2.4. Construction Methods

The County is evaluating the likely sequence of construction to determine traffic control during construction. Traffic control may include signage, flagmen, and both short and long-term temporary road closures and detours. The County will maintain two-way traffic on the existing bridge for a majority of the bridge, western wall, eastern wall and western road construction. It will be necessary to provide only a continuous, single lane of controlled traffic with a temporary signal, or full closure of Green Valley Road bridge, during construction of the eastern road. Traffic control signs will be placed at Missouri Flat, Forni Road and Mallard Lane to detour traffic onto Hwy 50. Additionally, other minor operations may require temporary closures or full closures for short-term durations. The full closure may last for up to six months but would reduce the overall amount of construction time. The County will prepare a traffic control plan in conjunction with the engineering plans. The traffic control plan will be prepared to address the coordination issues for residential access during road closures during construction.

The in-water work period will be restricted to the period between 15 April and 15 October, subject to the Streambed Alteration Agreement. A temporary creek crossing will be constructed downstream of the existing bridge. Several methods could be used to construct the temporary creek crossing. The abutments for the temporary creek crossing could be constructed with k-rails and clean gravel foundation. A steel or timber bridge deck would then be constructed. Temporary access roads are needed on the north and south banks of Weber Creek to access the temporary creek crossing. The temporary bridge deck and k-rails will be removed by 15 October.

The existing bridge will be removed after the completion of the new bridge. Demolition of the existing bridge will be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge will be removed from the project site and disposed of by the contractor. The construction contractor will prepare a bridge demolition plan.

A soil nail wall will be constructed to stabilize the western bank, along the downstream side of the western bridge abutment (Figure 7). A mechanically stabilized earth (MSE) gabion wall and flood wall will be constructed along the outside of the soil nail wall (Figure 7). Two additional gabion walls will be constructed along Green Valley Road. One wall will contour the north side of Green Valley Road; the other will be located at the intersection of Green Valley Road and Lode Road. A 10-ft-wide permanent access route will be constructed in front of the downstream east wall and a 2-ft-wide permanent access route will be constructed in front of the downstream west wall.

Construction of the new bridge and falsework may require diversion and/or dewatering of Weber Creek during construction of the abutments. Excavations at the abutments may need to be dewatered. Flows would pass through the existing creek under the bridge. Diversion methods may include the use of water pillows, rock, sandbags, sheet piling, pipes or coffer dams, or other structural methods approved by the Project Engineer and DFG.

Groundwater and seepage in the dewatered area will be removed in accordance with Section 401 of the Clean Water Act (CWA). Best management practices (BMPs) will be implemented during construction to prevent concrete or other materials from entering the channel.

Rock slope protection (RSP) will likely be placed around the bridge abutments and wing walls to stabilize the creek banks and cover the fill on top of the footing. The RSP may extend from the bed of the creek below the ordinary high water mark (OHWM) to the top of bank above the OHWM. Additional RSP will be placed around the flood wall on the north side of the new road alignment. The RSP will be placed up to 2 feet above the 100 year high water elevation to protect the flood wall against scour and sliding of the approach fills. It is anticipated that the removal of the existing abutments and subsequent regrading will require RSP to be placed along the lower portion of the creek bank as shown on the proposed Project map (Figure 3).

Two utility poles north of the existing bridge will be relocated to four new poles on the south side of Green Valley Road. An existing culvert under Green Valley Road, north of the bridge, will be extended to accommodate the widened road. A ditch will be constructed along the eastern wall to outfall to the northeast bank of Weber Creek. A drain will be constructed along the south side of Green Valley Road and under Lode Road to outlet to the southwestern bank of Weber Creek. Other minor culverts may be necessary across private driveways. Lode Road and private driveways within the project area will be reconstructed to conform to the new profile of Green Valley Road.

2.5. Construction Contract

The County DOT would retain a construction contractor to construct the proposed improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed Project activities and for implementing construction-related mitigation measures. County DOT would provide construction contractor oversight and management and would be responsible for verifying implementation of the mitigation measures. The contractor would construct the proposed Project in accordance with the Public Contracts Code of the State of California, the State of California Department of Transportation Standard Plans and Standard Specifications, and the Contract, Project Plans, and Project Special Provisions under development by the County DOT. The following are a combination of standard and project-specific procedures/requirements applicable to Project construction:

- Construction contract special provisions will require that a Traffic Management Plan be prepared. The Traffic Management Plan will include construction staging and traffic control measures to be

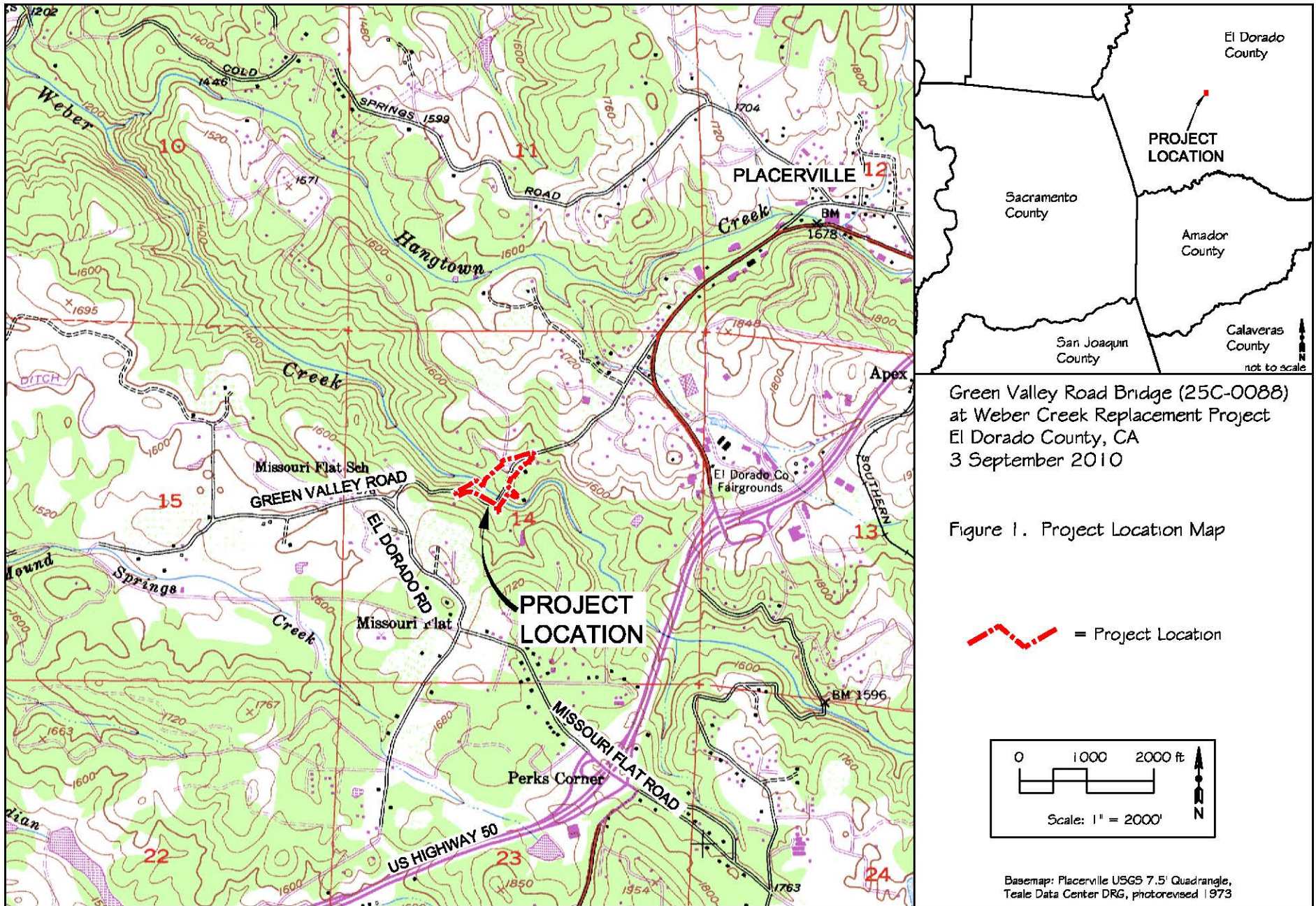
implemented during construction to maintain and minimize impacts to traffic during construction. The Traffic Management Plan will address the coordination issues for residential access during short-term road closures during the construction window;

- Contract special provisions will require compliance with El Dorado County Air Quality Management District (AQMD) Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions;
- Contract provisions will require notification of County DOT and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains should any be discovered during project construction;
- Contract provisions will require compliance with the El Dorado County Grading Ordinance and Storm Water Management Plan for Western El Dorado County and implementation of Best Management Practices as identified in the National Pollutant Discharge Elimination System (NPDES) permit and/or Storm Water Management Plan;
- County DOT or its construction contractors will conduct early coordination with utility service providers, law enforcement and emergency service providers to ensure minimal disruption to service during construction;
- County DOT and its construction contractors will comply with the State of California Standard Specifications (May 2006), written by the State of California Department of Transportation, for public service provision; and
- The Project would comply with General Plan Policy 6.5.1.11 pertaining to construction noise.

2.6. Project Schedule

The Project is scheduled to commence in 2013 and is expected to be completed in two construction seasons.

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Green Valley Road Bridge
 (25C-0088) at Weber Creek
 Replacement Project
 El Dorado County, CA
 3 September 2010

 = Project Location

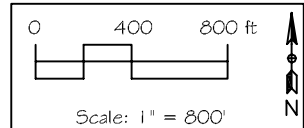
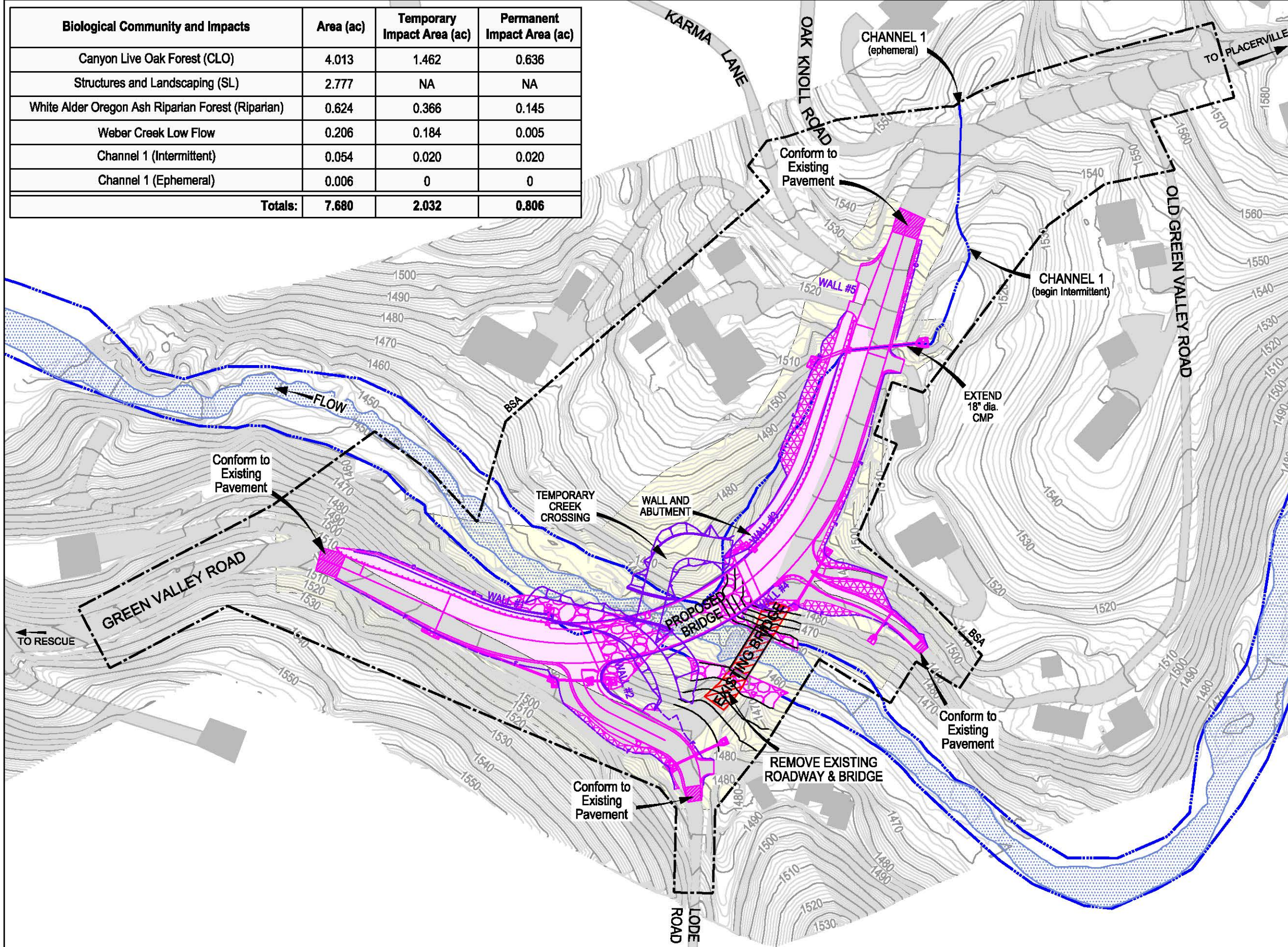


Figure 2.
 Aerial Photograph

Basemap:
 1 April 2004 Image
 Copyright 2008, DigitalGlobe,
 Inc. All rights reserved.

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Biological Community and Impacts	Area (ac)	Temporary Impact Area (ac)	Permanent Impact Area (ac)
Canyon Live Oak Forest (CLO)	4.013	1.462	0.636
Structures and Landscaping (SL)	2.777	NA	NA
White Alder Oregon Ash Riparian Forest (Riparian)	0.624	0.366	0.145
Weber Creek Low Flow	0.206	0.184	0.005
Channel 1 (Intermittent)	0.054	0.020	0.020
Channel 1 (Ephemeral)	0.006	0	0
Totals:	7.680	2.032	0.806

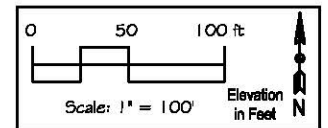


Green Valley Road Bridge (25C-0088) at Weber Creek Replacement Project
 El Dorado County, CA
 1 July 2011

Figure 3. Project Map

- = Biological Study Area (BSA) (7.206 acres)
- = Channel 1
- = Weber Creek OHWM (0.650 acre)
- = Permanent impact
- = Temporary Impact
- = Remove existing Bridge
- = Proposed Grading
- = Proposed Rock Slope Protection (RSP)
- = Weber Creek Low Flow
- = Proposed culvert with inlet and outlet





Note:
 1. Temporary impacts to Weber Creek; portions of the creek may be dewatered.
 2. Footings and walls assume 5' wide base from face of abutment and walls. (Walls assumed to be load bearing)

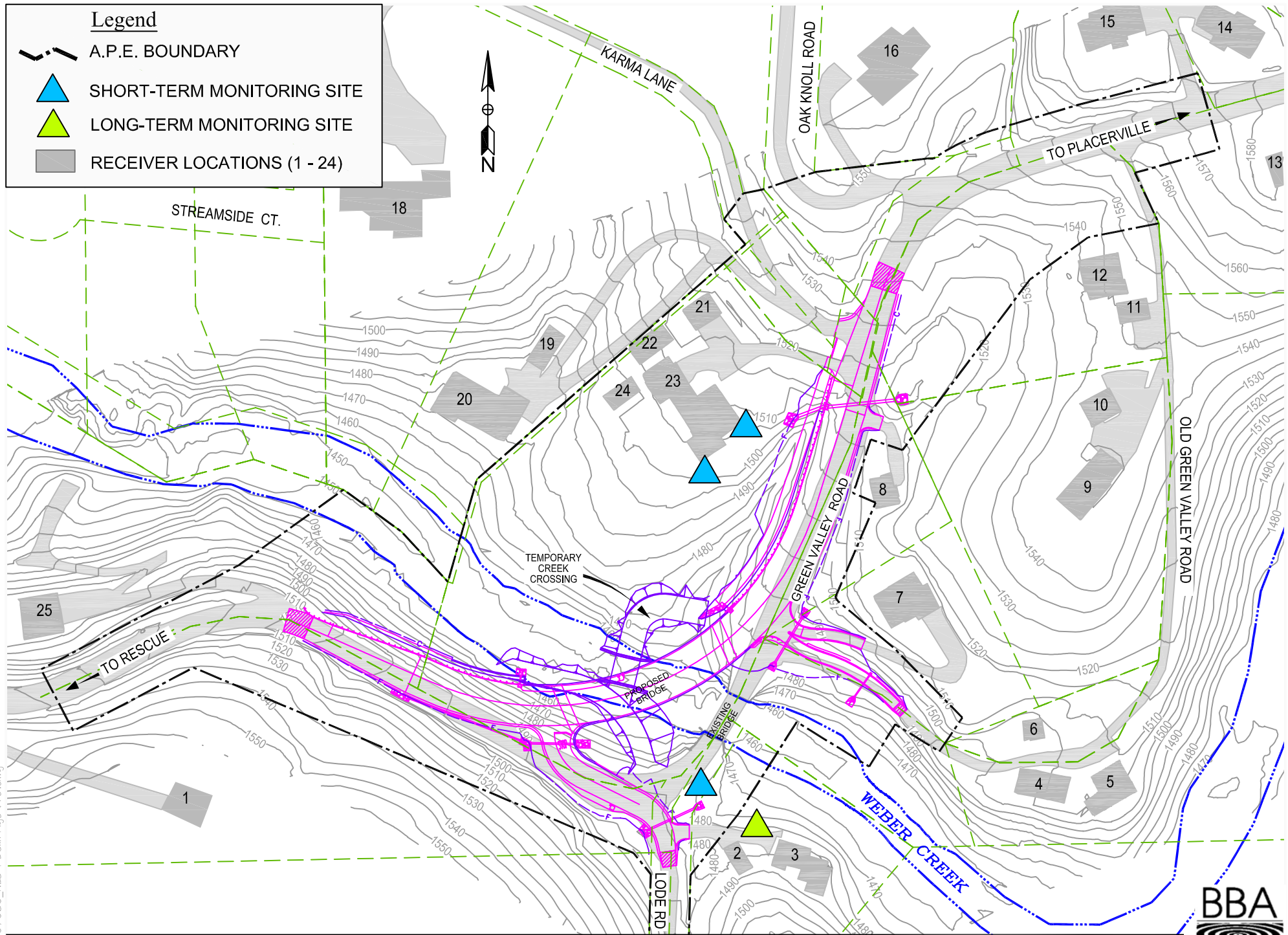


Basemap: Master GVWEB.dwg;
 Master Geometrics.dwg (shown in magenta),
 Temp Creek Crossing.dwg (shown in purple)
 El Dorado County Department of Transportation

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Legend

-  A.P.E. BOUNDARY
-  SHORT-TERM MONITORING SITE
-  LONG-TERM MONITORING SITE
-  RECEIVER LOCATIONS (1 - 24)



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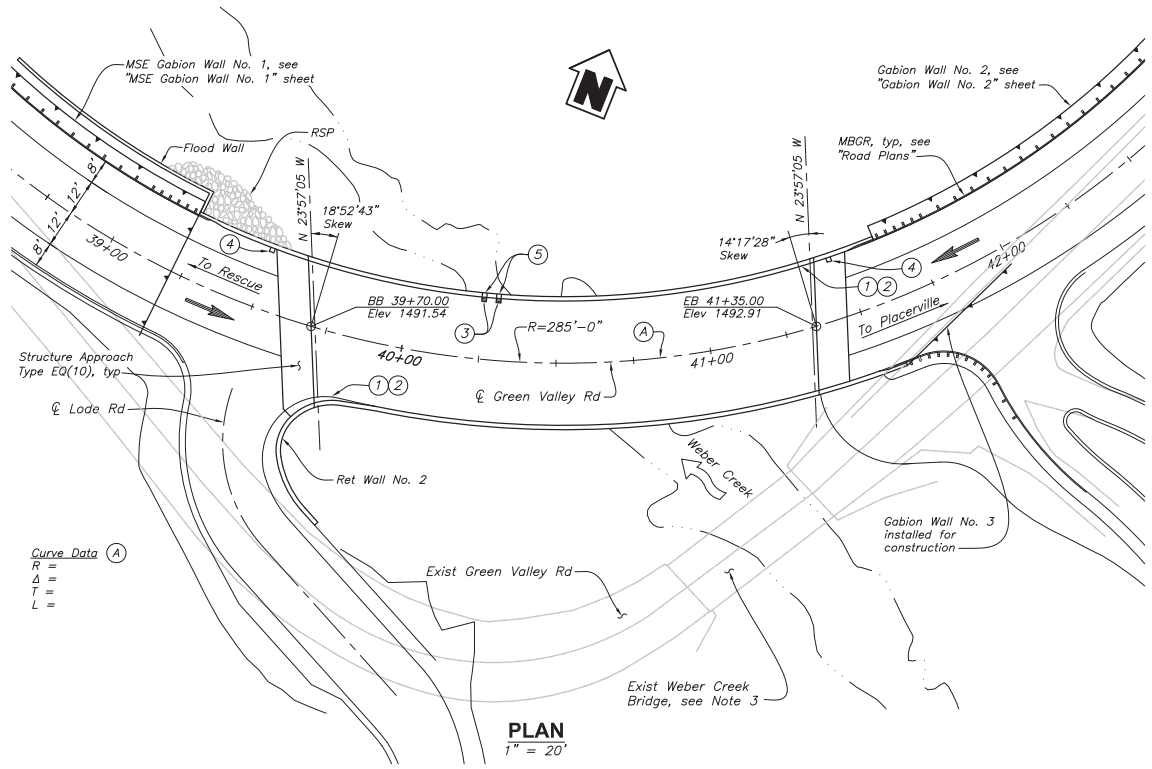
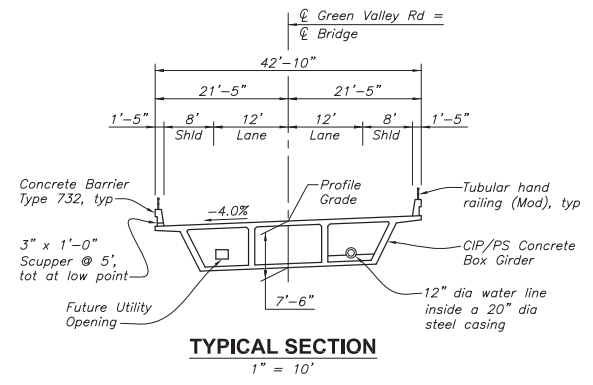
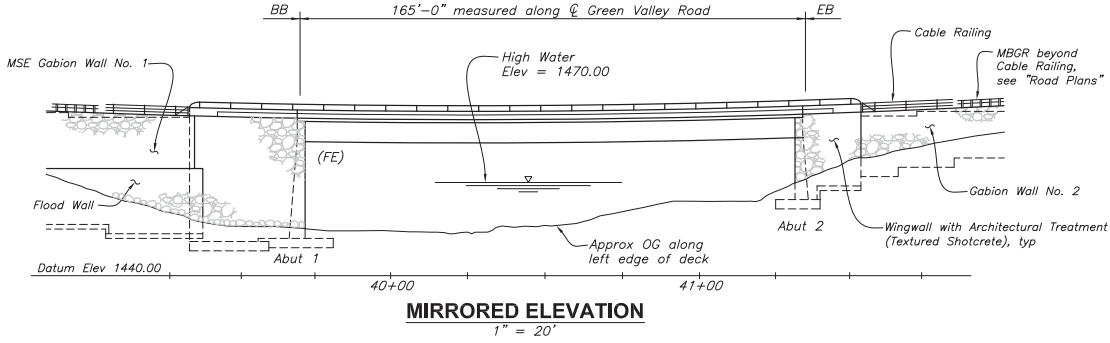
Basemap: Master GVWEB.dwg;
 Master Geometrics.dwg (shown in magenta), Temp
 Creek Crossing.dwg (shown in purple)
 El Dorado County Department of Transportation

Figure 4. Project Vicinity and Noise Measurement Sites



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 ORIGINAL SCALE IS IN INCHES
 FOR REDUCED PLANS



- NOTES:**
- The Contractor shall verify all controlling field dimension before ordering or fabricating any material.
 - For Hydraulic Summary Table, see "Foundation Plan" sheet.
 - Remove existing bridge superstructure, existing bridge abutments to remain in place.

- LEGEND:**
- ① Paint "Bridge No. 29-???? & year of construction".
 - ② Paint "Weber Creek Bridge".
 - ③ ■ Deck Drain Type D-3.
 - ④ □ Drainage Inlet, See "Road Plans".
 - ⑤ 3" x 1'-0" Scupper.
 - (FE) Fixed End Integral Abutment.
 - Indicates new structure.
 - Indicates existing features.

30% Submittal

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF:	DESIGNED: SP	DRAWN: JDV
REGISTERED CIVIL ENGINEER	CHECKED: -	DATE: 03/5/10
DATE:	ROAD NUMBER: 002	



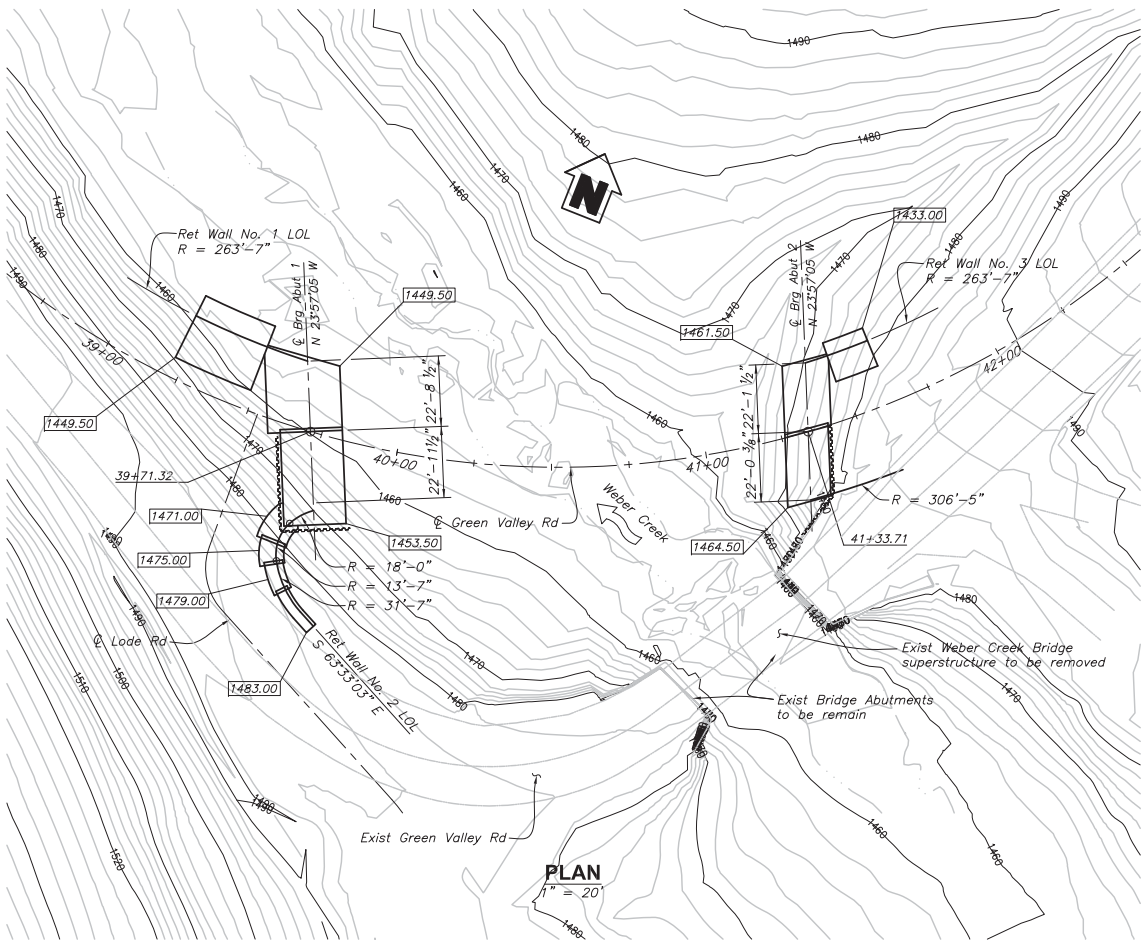
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

GREEN VALLEY ROAD
AT WEBER CREEK
GENERAL PLAN

SHEET	S-01
1 OF 4	
W.D. No.	77114

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 FOR REDUCED PLANS



Hydrologic Summary

Benchmark No. 1

Benchmark No. 2

NOTES:

1. Contours shown are existing ground.
2. For underground utilities, see "Road Plans".
3. Topographic survey and information provided by County.

LEGEND:

- 1449.50 Indicates bottom of footing elevation.
- Temporary Shoring.

30% Submittal

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF :		DESIGNED: SP	DRAWN: JDV
REGISTERED CIVIL ENGINEER		CHECKED: -	DATE: 03/5/10
DATE:		ROAD NUMBER: 002	



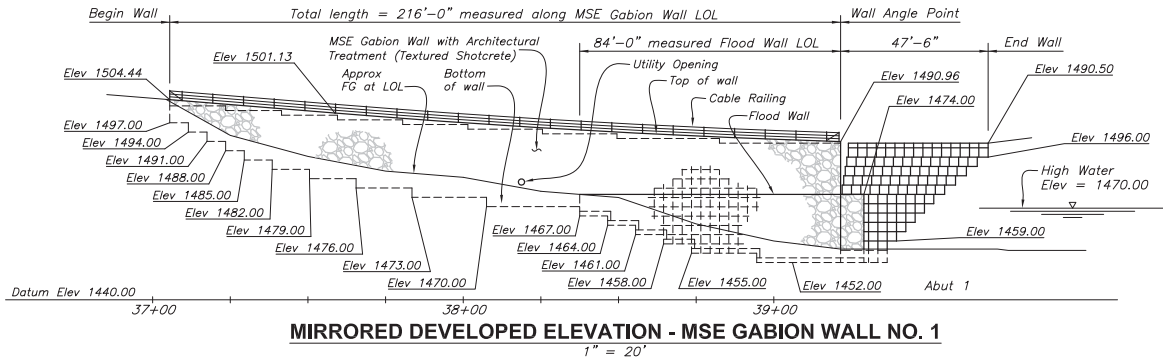
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

GREEN VALLEY ROAD
AT WEBER CREEK
FOUNDATION PLAN

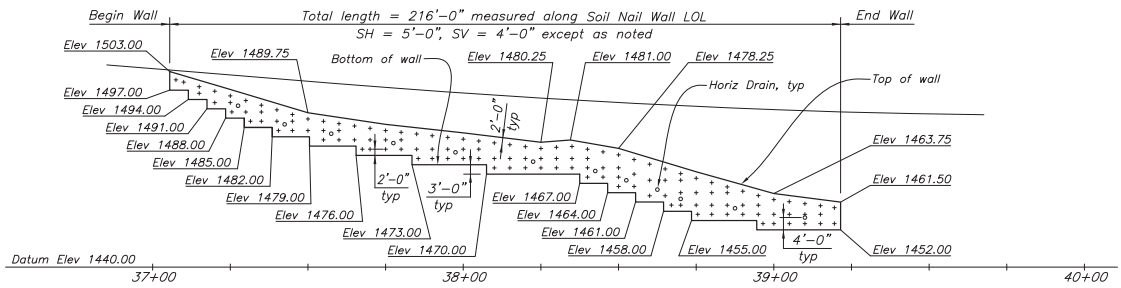
SHEET	S-02
2 OF 4	
W.D. No.	77114

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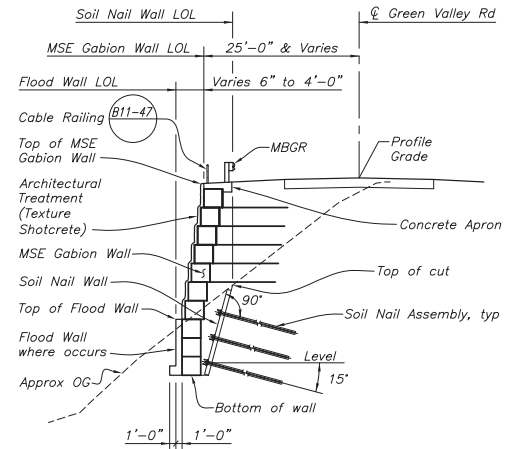
Drawing name: C:\pwworking\acc\james0394\3-Weber Creek Gabion Wall 1 -35 Percent.dwg Layout Tab: Layout1 Aug 27,2010 - 10:43am jk
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 FOR REDUCED PLANS



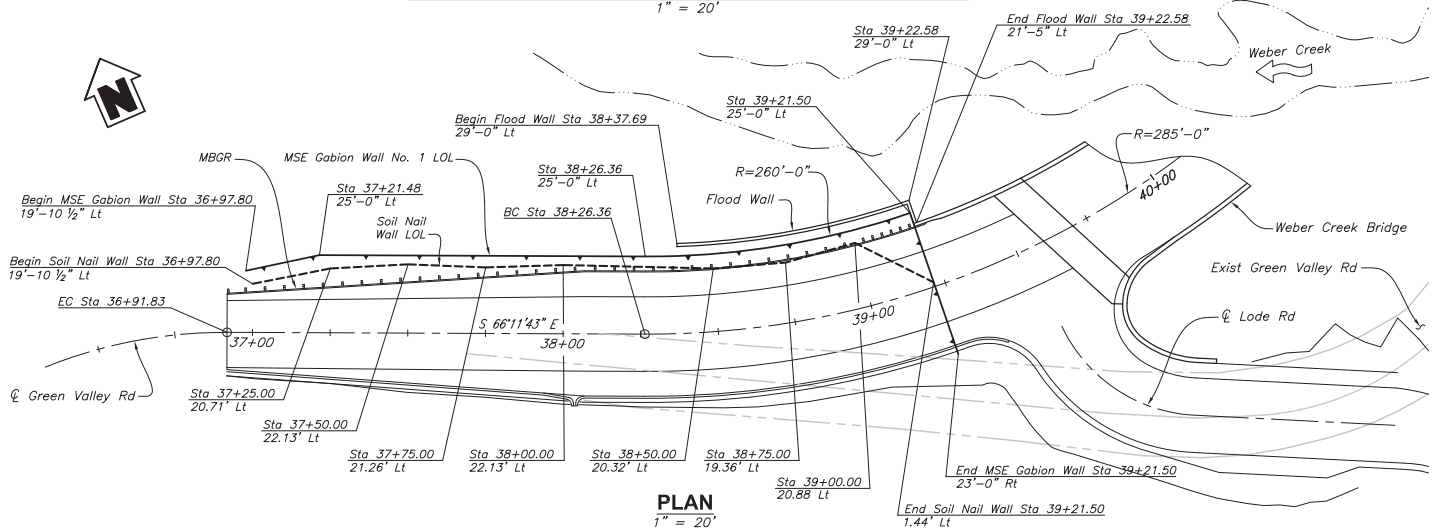
MIRRORED DEVELOPED ELEVATION - MSE GABION WALL NO. 1
1" = 20'



MIRRORED DEVELOPED ELEVATION - SOIL NAIL WALL
1" = 20'



TYPICAL SECTION
1" = 10'



PLAN
1" = 20'

- NOTES:**
- The Contractor shall verify all controlling field dimension before ordering or fabricating any material.
 - For Hydrologic Summary Table, see "Foundation Plan & Pile Details" sheet.
- LEGEND:**
- Indicates new structure.
 - - - Indicates existing features.
 - - - - - Indicates Soil Nail Wall.
 - + Location of soil nail assembly.
 - SH Horizontal spacing of soil nail assembly SH = 5'-0" max.
 - SV Vertical spacing of soil nail assembly SV = 5'-0" max.
 - o Location of horizontal drain

30% Submittal

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF:	DESIGNED: KS	DRAWN: JV
REGISTERED CIVIL ENGINEER	CHECKED: -	DATE: 03/5/10
DATE:	ROAD NUMBER: 002	



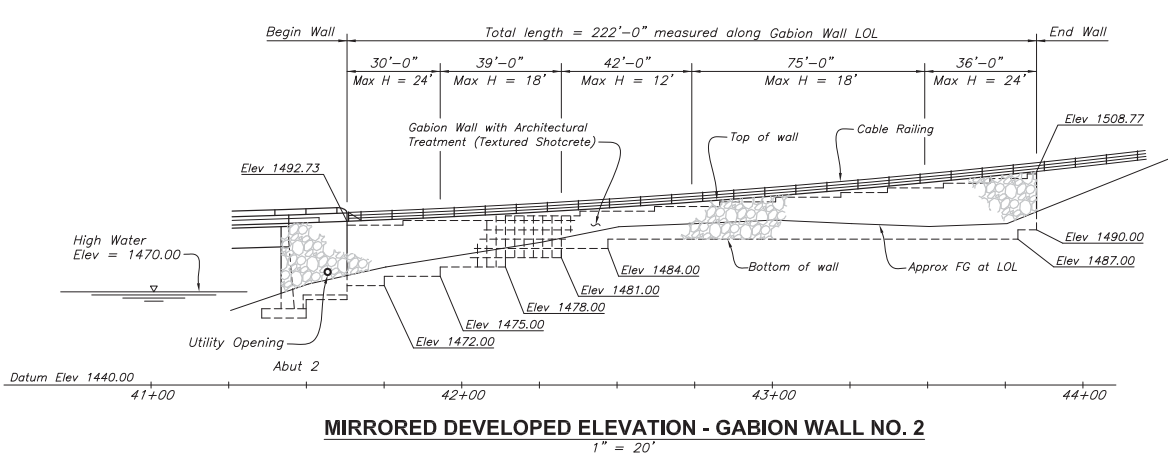
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

GREEN VALLEY ROAD
AT WEBER CREEK
GENERAL PLAN - MSE GABION WALL NO. 1

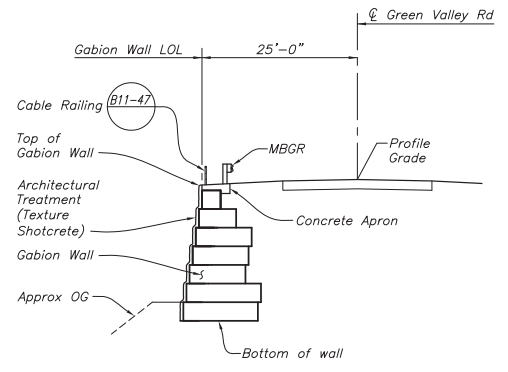
SHEET
S-03
3 OF 4
W.O. No. 77114

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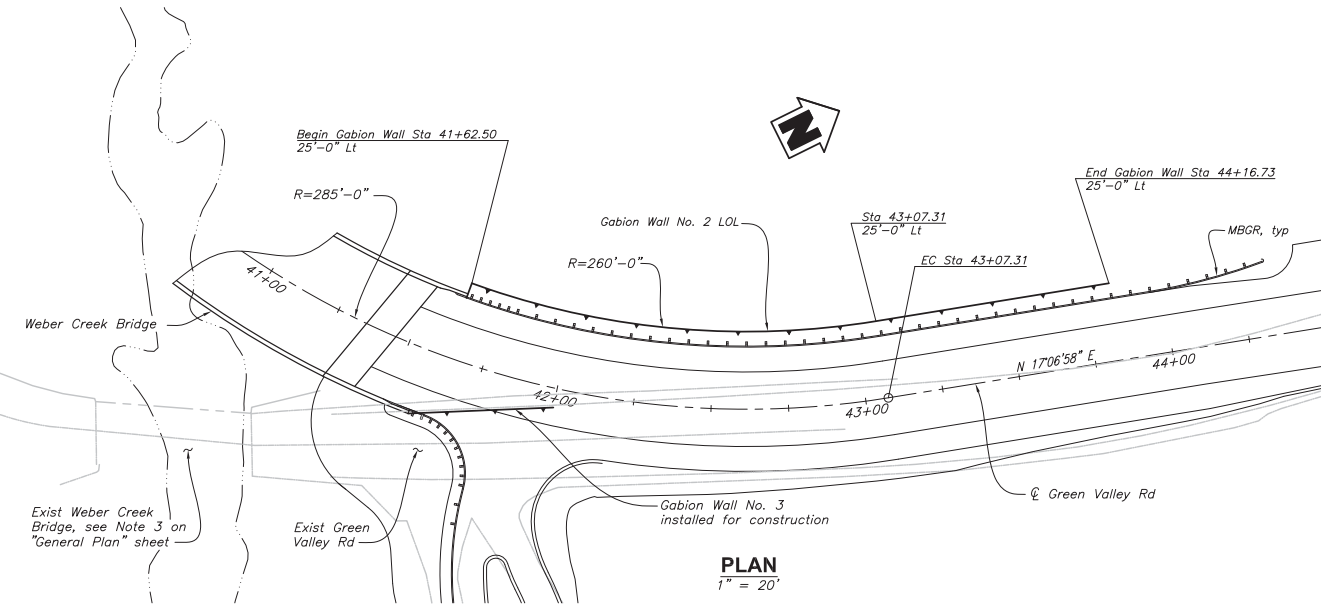
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 FOR REDUCED PLANS



MIRRORED DEVELOPED ELEVATION - GABION WALL NO. 2
 1" = 20'



TYPICAL SECTION
 1" = 10'



PLAN
 1" = 20'

- NOTES:**
- The Contractor shall verify all controlling field dimension before ordering or fabricating any material.
 - For Hydrologic Summary Table, see "Foundation Plan & Pile Details" sheet.

- LEGEND:**
- Indicates new structure.
 - - - Indicates existing features.

30% Submittal

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF :	DESIGNED: KS	DRAWN: JV
REGISTERED CIVIL ENGINEER	CHECKED: -	DATE: 03/5/10
DATE:	ROAD NUMBER: 002	



EL DORADO COUNTY
 DEPARTMENT OF TRANSPORTATION

GREEN VALLEY ROAD
 AT WEBER CREEK
 GENERAL PLAN - GABION WALL NO. 2

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2.7. Required Permit Approvals

Based on the environmental conditions of the project area and the analysis of potential impacts provided in Section 4, Project implementation will require compliance with the Clean Water Act and issuance of other approvals, as listed in the table below:

Table 2. Required Permit Approval

Approving Agency	Required Permit/Approval	Required For
<i>Federal Agencies</i>		
California Department of Transportation per Federal Highway Administration's NEPA delegation	National Environmental Policy Act (NEPA) Categorical Exclusion	Funding
U.S. Army Corps of Engineers	Nationwide Section 404 Discharge Permit. (Clean Water Act, 33 USC 1341)	Discharge of dredge/fill material into "Waters of the United States," including wetlands.
<i>State Agencies</i>		
California Department of Transportation	Project Approval/ NEPA Compliance	Funding through the Federal Highway Bridge Program Funding Approval
State Water Resources Control Board, Regional Water Quality Control Board	General Construction Activity Storm Water Permit. Notice of Intent. (Clean Water Act Section 402; 40 CFR Part 122)	Storm water discharges associated with construction activity for greater than 1 acre of land disturbance
State Water Resources Control Board, Regional Water Quality Control Board	Water Quality Certification (Clean Water Act Section 410), if project requires Army Corps of Engineers 404 permit.	Discharge into "Waters of the U.S.," including wetlands (see Army Corps of Engineers Section 404 Permit above).
California Department of Fish and Game	Streambed Alteration Agreement. (Fish and Game Code 1602)	Change in natural state of river, stream, lake (includes road or land construction across a natural streambed) which affects fish or wildlife resource.
<i>Local Agencies</i>		
El Dorado County	Project Approval/CEQA Compliance	Project implementation and funding
El Dorado County Air Quality Management District	Fugitive Dust Plan	District Rule 223-1 (Fugitive Dust, Construction Activities)

3. INITIAL STUDY CHECKLIST AND SUPPORTING DOCUMENTATION

3.1. Initial Study Checklist

This section of the Initial Study incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Each resource topic section provides a determination of potential impact and an explanation for the checklist impact questions. The following 16 environmental categories are addressed in this section:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities

Each of the above listed environmental categories was fully evaluated and one of the following four determinations was made for each checklist question:

- **“No Impact”** means that no impact to the environment would occur as a result of implementing the Project.
- **“Less than Significant Impact”** means that implementation of the Project would not result in a substantial and/or adverse change to the environment and no mitigation is required.
- **“Potentially Significant Unless Mitigation is Incorporated”** means that the incorporation of one or more mitigation measures would reduce the impact from potentially significant to less than significant.
- **“Potentially Significant Impact”** means that there is either substantial evidence that a project-related effect would be significant or, due to a lack of existing information, could have the potential to be significant.

3.2. Setting, Impacts, and Mitigation Measures

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
I. AESTHETICS—Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic 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 checked="" type="checkbox"/>	<input 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?

Environmental Setting

The Project is located in the western foothills of the Sierra Nevada Mountains, at an elevation of approximately 1,500 ft. It is located in a relatively rural area of El Dorado County, west of the City of Placerville. The project area includes existing ROW and portions of private parcels. The project vicinity includes the existing roads, disturbed areas along the road shoulders, driveways, homes and accessory structures, and horticultural landscaping near the homes.

Potential Environmental Effects

- a) **No Impact.** A scenic vista refers to the view of an area that is visually or aesthetically pleasing. Aesthetic components of a scenic vista include; 1) scenic quality, 2) sensitivity level, and 3) view access.

Table 5.3-1 of the General Plan EIR identifies multiple scenic views and resources. There are no identified scenic vistas within or near the vicinity of the project site. The replacement bridge will be visually consistent with other transportation infrastructure in the vicinity of the Project.

- b) **No Impact.** The nearest scenic highway designation is on U.S. 50 between the City of Placerville and the Tahoe Basin. This designation occurs approximately 0.5 mile east of the proposed project area. The proposed project area is not visible from U.S. 50. As such, the Project would not affect aesthetic resources within the proximity of a state scenic highway.
- c) **Potentially Significant Unless Mitigation Incorporated.** Construction of the project would result in physical change to the visual characteristics of the immediate project area by replacing the existing bridge with a new bridge structure and widening the roadway to County standards. Native vegetation and trees will be replaced in accordance with the revegetation and erosion control plan.

The Project will install new concrete retaining walls greater than 10 ft tall at the four corners of the bridge. Large retaining walls are out of context with the existing visual character of the landscape unit and regional viewshed. Viewers may not expect to see large, unadorned, concrete retaining walls in such a natural setting. Installation of these walls may adversely affect the visual integrity of the natural setting.

Mitigation Measure AESTH-1

The following mitigation measure will be implemented to minimize the visual impact of the retaining walls:

- The four new retaining walls on both sides of the north and south bridge abutments will be given an aesthetic treatment (e.g., a “natural stone” look through the use of a rock gravity type wall or similar treatment).

- d) **No Impact.** The Project does not introduce any new source of light or glare.

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
II. AGRICULTURAL RESOURCES—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"/>

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

Environmental Setting

The Project is located in a rural residential area. No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or lands under Williamson Act contracts occur in the project area (State of California Department of Conservation 2007).

Potential Environmental Effects

- a) **No Impact.** No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by the Project.
- b) **No Impact.** No lands either zoned for agricultural uses or subject to a Williamson Act contract exist within or adjacent to the Project area.
- c) **No Impact.** Farmland and agricultural uses do not occur on or in the vicinity of the Project. The Project will not result in the conversion of farmland to non-agricultural use.

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:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project area is located in the Mountain Counties Air Basin (MCAB). The San Francisco Bay Area Air Basin and the Sacramento Valley Air Basin are located to the west, and the San Joaquin Valley Air Basin is located to the south. Climate in the MCAB relate to elevation and proximity to the Sierra Ridge. Precipitation is greater and temperatures are lower at higher elevations. Summer temperatures in the project area are in the mid- to upper nineties. Winter temperatures are in the upper thirties to lower

forties. Average precipitation in the project area is 3.2 inches per month with the majority of rainfall in the months of January through March.

The air quality of a region is determined by the air pollutant emissions (quantities and type of pollutants measured by weight) and by ambient air quality (the concentration of pollutants within a specified volume of air). Air pollutants are characterized as primary and secondary pollutants. Primary pollutants are those emitted directly into the air, for example carbon monoxide (CO), and can be traced to a single pollutant source. Secondary pollutants are those pollutants that form through chemical reactions in the atmosphere, for example reactive organic gasses (ROG) and nitrogen oxides (NO_x) combine to form ground level ozone, or smog.

The Federal Clean Air Act of 1977 established national ambient air quality standards (NAAQS). These standards are divided into primary and secondary standards. Primary standards are designed to protect public health and secondary standards are designed to protect other values. Because of the health-based criteria identified in setting the NAAQS, the air pollutants are termed “criteria” pollutants. California has adopted its own, more stringent, ambient air quality standards (CAAQS). El Dorado County is currently in nonattainment status for the 8-hour ozone NAAQS and for the ozone and PM10 CAAQS.

The El Dorado County Air Quality Management District (AQMD) administers the state and federal Clean Air Acts in accordance with state and federal guidelines. The AQMD regulates air quality through its district rules and permit authority. It also participates in planning review of discretionary project applications and provides recommendations.

The following District rules apply to the Project:

- Rule 223 Fugitive Dust – General Requirements
- Rule 223-1 Fugitive Dust – Construction Requirements
- Rule 223-2 Fugitive Dust – Asbestos Hazard Mitigation
- Rule 224 – Cutback Asphalt

Rules 223, 223-1, and 223-2 regulate fugitive dust generated by construction activities and require appropriate avoidance measures to reduce air quality impacts. Rule 224 relates to asphalt cement that has been liquefied by blending with petroleum solvents.

El Dorado County AQMD’s Guide to Air Quality Assessment (2002) specifies specific daily emissions thresholds that can be used to determine the significance of project emissions. Thresholds of significance for specific pollutants of concern are as follows:

- ROG: 82 lbs/day
- NO_x: 82 lbs/day
- PM10: AAQS

Potential Environmental Effects

The Project would result in short-term, temporary air pollutant emissions from construction activities. Construction emissions were estimated for the Project using the Sacramento Air Quality Management District’s *Road Construction Emissions Model, Version 6.3-2* as recommended in the El Dorado County AQMD *Guide to Air Quality Assessment*. The results are in Table 3.

Table 3. Estimated construction emissions

Project Phases	ROG lbs/day	CO lbs/day	NO _x lbs/day	PM10 lbs/day	Exhaust PM10 lbs/day	Fugitive Dust PM10 lbs/day
Grubbing/land clearing	3.7	16.0	31.7	14.3	1.3	13.0
Grading/excavation	5.2	25.7	42.0	15.0	2.0	13.0
Drainage/utilities/sub-grade	3.6	14.9	27.6	14.4	1.4	13.0
Paving	2.2	8.4	12.5	1.1	1.1	--
Maximum lbs/day	5.2	25.7	42.0	15.0	2.0	13.0
Significance Threshold	82	AAQS	82	AAQS	N/A	N/A
Significant?	NO	NO	NO	NO	N/A	N/A

Notes: Data entered to emissions model: Project Start Year: 2012; Project Length (months): 12; Total Project Area (acres): 7.68; Total Soil Imported/Exported (yd³/day): 80. PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures. Total PM10 emissions are the sum of *exhaust* and *fugitive dust* emissions.

a) **No Impact.** The proposed Project is identified in the Sacramento Metropolitan Transportation Plan 2035 (SACOG 2008). Projects included in the Metropolitan Transportation Plan have been determined to be consistent with the planning goals of the State Implementation Plan.

b) **Less Than Significant.** El Dorado County is in nonattainment status for both federal and state ozone standards and the state PM10 standard. Construction activities would result in short-term increases in emissions from the use of heavy equipment that generate dust, exhaust, and tire-wear emissions and from paints and coatings. Project construction would create short-term increases in ROG, NO_x, and PM10 emissions from vehicle and equipment operation. None of the estimated emissions exceed the County's significance thresholds (Table 3). The Project would not generate additional traffic on Green Valley Road. No operational emissions will result from the Project.

c) **No Impact.** Cumulative net increases of criteria pollutants have been evaluated in the Sacramento Metropolitan Transportation Plan 2035 (SACOG 2008). This Project is referenced and evaluated in the Sacramento Metropolitan Transportation Plan 2035.

d) **Less Than Significant.** Adjacent residences have the potential to be exposed to PM10, PM2.5, CO, ROG, and NO_x during construction. These impacts are considered less than significant due to the limited nature of the Project and short-term construction period. The project is not located within an area "more likely to contain naturally occurring asbestos" (California Department of Conservation 2000).

e) **Less Than Significant.** Construction activities would involve the use of construction equipment and asphalt paving, which have distinctive odors. Odors are considered less than significant because of the limited number of the public affected and the short-term nature of the emissions.

f) **Less Than Significant.** Assembly Bill 32, adopted in 2006, established the Global Warming Solutions Act of 2006 which requires the State to reduce greenhouse gases (GHGs) to 1990 levels by 2020. Senate Bill 97, adopted in 2007, requires the Governor's Office of Planning and Research (OPR) to develop draft CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." OPR is required to "prepare, develop, and transmit" the guidelines to the Resources Agency on or before July 1, 2009. The Resources Agency must certify and adopt the guidelines on or before January 1, 2010.

GHGs are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (OPR 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

GHG emissions from the Project would be produced from the materials used in the new bridge and road construction as well as construction-related equipment emissions. The Project would not result in the

generation of additional vehicle trips after construction is complete. GHG emissions resulting from construction activity are short-term in nature and limited in scope. Thus, while the Project would have an incremental contribution within the context of the County and region, the project impact is not cumulatively considerable.

g) **No Impact.** The Project will not generate significant emissions of greenhouse gases and, therefore, will not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing the emission of greenhouse gases.

IV. BIOLOGICAL RESOURCES—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project area includes Green Valley Road, an approximately 200 ft section of Old Green Valley Road, a ± 140 ft section of Karma Lane, a ±120 ft section of Oak Knoll Road, and a ±120 ft section of Lode Road. The elevation of the existing Green Valley Road Bridge is approximately 1,500 ft above sea level. Weber Creek flows in a west-northwesterly direction through the project area. A partially ephemeral and partially intermittent tributary to Weber Creek flows south through the project area and drains to Weber Creek.

Biological communities in the 7.68-ac project area include: canyon live oak forest (4.013 ac), white alder-Oregon ash riparian forest (0.624 ac), Weber Creek (0.206 ac) and a drainage that is both ephemeral and intermittent (0.060 ac). The remaining 2.777 ac in the project area is composed of large-lot rural

residential properties, and horticultural landscaping. Ruderal species, including Italian thistle, yellow star-thistle, annual beard grass, and medusa head, occur throughout the project area.

Dominant species in the canyon live oak forest include canyon live oak (*Quercus chrysolepis*), interior live oak (*Quercus wislizenii* var. *wislizenii*), black oak (*Quercus kelloggii*), grey pine (*Pinus sabiniana*), and ponderosa pine (*Pinus ponderosa*). These trees occur in natural areas and on road cuts along Green Valley Road's existing alignment and in the proposed new bridge location.

The white alder-Oregon ash riparian forest occurs along the segment of Weber Creek in the project area. Most of the riparian trees in this community are located below the OHWM of Weber Creek, but outside of the low flow channel. Dominant tree species are white alder (*Alnus rhombifolia*) and Oregon ash (*Fraxinus latifolia*). The dominant shrub species is the nonnative, invasive Himalayan blackberry (*Rubus discolor*). Other species in the shrub layer include California wild grape (*Vitis californica*), poison oak (*Toxicodendron diversilobum*), and rose (*Rosa* sp.).

Weber Creek is mapped as a perennial stream on the USGS Placerville quad map and as R3UBH (Riverine, Upper Perennial, Unconsolidated Bottom, Permanently Flooded) on the National Wetland Inventory map. Weber Creek flows under Green Valley Road and drains to the American River approximately 12 mi west of the project area.

A partially ephemeral and partially intermittent tributary to Weber Creek runs parallel to Green Valley Road on the north side of Weber Creek. The channel is culverted twice under Green Valley Road: once near Oak Knoll Road where it crosses to the east side of Green Valley Road, and once near Karma Lane where it crosses back to the west side of Green Valley Road. The portion of the channel north of the culvert near Oak Knoll Road is ephemeral and was not flowing during the delineation; the portion of the channel south of the culvert near Oak Knoll Road is intermittent and was flowing during the delineation. The intermittent portion of the channel likely maintains intermittent flow due to landscape irrigation runoff and possibly a seep or leaking well.

Potential impacts to biological and wetlands resources were evaluated in a Natural Environment Study (NES; Sycamore Environmental 2010). The NES is a standard Caltrans format for documenting Project impacts. The NES determined that habitat for the following species could be occupied at the time of construction. This biological resources section evaluates potential impacts of the Project on these species:

- California red-legged frog
- Foothill yellow-legged frog
- Northwestern pond turtle
- Migratory birds and birds of prey

Potential Environmental Effects

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?
Potentially Significant Impact Unless Mitigation Incorporated.

California red-legged frog (CRLF; *Rana draytonii*)

Protocol surveys for CRLF were conducted in 2008 and the Project area was found to be unoccupied by CRLF. The Project area is outside the dispersal area of known populations in El Dorado County which are over 13 miles away. Weber Creek in the Project area does not provide breeding habitat for CRLF due to the lack of emergent vegetation along its banks and the absence of deep, slow moving backwater or pools during the breeding season.

Weber Creek in the Project area could be used for summer-time dispersal of CRLF. It is unlikely that CRLF would disperse into the Project area based on the distance to the nearest population of CRLF (13 mi to the east), the presence of movement barriers between potential breeding sites within one mile of the Project area, the presence of nonnative predators in Weber Reservoir located downstream of the Spivey Pond CRLF population, and the lack of evidence that CRLF occur within one mile of the Project area. The County and Caltrans are currently in the process of completing formal Section 7 consultation with USFWS regarding CRLF.

Removal of riparian trees and the potential diversion/dewatering in Weber Creek could cause temporary impacts to potentially dispersing CRLF by displacing them from the Project area until completion of construction.

The Project will remove approximately 0.145 acres of the riparian forest along Weber Creek, which includes the removal of approximately 23 riparian trees. Construction of the new bridge and falsework may require diversion and/or dewatering of Weber Creek during construction of the abutments. Excavations at the abutments may need to be dewatered. Flows would pass through the existing creek under the bridge. Diversion methods may include the use of water pillows, rock, sandbags, sheet piling, pipes or coffer dams, or other structural methods approved by the Project Engineer and DFG.

Mitigation Measure BIO-1

The following measures will be implemented to protect CRLF:

- In-water construction activities will occur from April 15 to October 15, subject to the Streambed Alteration Agreement, or before the onset of the rainy season, whichever occurs first. The rainy season is defined as a frontal system that deposits 0.25 inch or more of precipitation during one event in the area.
- Rock slope-protection (RSP) will be "1/4 ton" Class placed by Method B of the Caltrans Standard Specifications.
- RSP (1/4 ton, Method B) will be backfilled with native earth materials. Native material will be backfilled between the voids of the angular RSP and compacted to 85% using hand-tamping equipment.
- Native material soil will be placed in the RSP above the 5-year storm event (as determined by the HDR model).
- Only clean rock material shall be used for RSP.
- A toxic materials control and spill-response plan will be developed and implemented for the proposed Project.
- Throughout Project construction and implementation, hazardous materials will be stored at an approved storage facility located at least 100 ft from any surface waters. Refueling and vehicle maintenance will be performed at least 100 ft from receiving waters.
- Temporary orange construction barrier fencing (and sedimentation fencing in some cases) shall be installed around the construction areas.
- After Project completion, native riparian trees impacted or removed due to Project construction will be replanted at a 2:1 ratio (2 trees planted for every 1 tree removed) within the riparian zone in the Project area. Approximately forty-six native riparian trees will be planted for the estimated 23 native trees removed. The success criterion for the replacement trees is a 60 percent or greater establishment rate. Appendix G, Revegetation and Erosion Control Specifications and Appendix I, Compensatory Mitigation and Monitoring Plan of the NES describes the methods and criteria for replacement of trees in the Project area.

- A biological resources education program will be conducted for construction crews before Project implementation. The education program will include a brief review of special-status species that may occur in the project area (including life history, habitat requirements, and pictures of the species), the portions of the project area in which they may occur, and their legal status. The program will also cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted as appropriate for new personnel as they are brought on the job during the construction period. Restrictions and guidelines that must be followed by construction personnel are as follows:
 - Project-related vehicles shall observe posted speed limits on hard-surfaced roads and a 10 mi-per-hour speed limit on unpaved roads during travel in the project area;
 - Project-related vehicles and construction equipment shall restrict off-road travel to the designated construction area;
 - Night time construction adjacent to Weber Creek shall be minimized to the extent possible;
 - All food-related trash shall be disposed of in closed containers and removed from the project area at least once each week during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the project area;
 - No pets or firearms shall be allowed in the project area;
 - No rodenticides or herbicides shall be applied in the project area during construction activities;
 - To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel shall not service vehicles or construction equipment outside of designated staging areas;
 - Any worker who inadvertently injures or kills a CRLF or finds one dead, injured, or entrapped, shall immediately stop construction activities and report the incident to the biological monitor. The biological monitor shall immediately notify El Dorado County, who will provide verbal notification to U.S. Fish and Wildlife Service's (USFWS) endangered species office in Sacramento, California, and to the local California Department of Fish and Game (CDFG) warden or biologist within 3 working days (it may not be practical to immediately halt some construction activities, such as the pouring of concrete. For these activities, more than 3 days may be required for notification so that the activity can be safely completed). El Dorado County shall follow up with written notification to USFWS and the CDFG within 5 working days.
- A preconstruction survey for CRLF shall occur within 48 hours prior to the start of construction activities within the riparian and aquatic habitat at Weber Creek. In the event that a CRLF is observed during the preconstruction survey, USFWS will be notified and the CRLF will be monitored until it leaves the project site. A qualified biologist will be present during clearing and grubbing activities in the riparian corridor. Clearing and grubbing of the brush and blackberry shrubs will be performed by hand or with hand tools. Mechanized vehicles will not be used to clear the brush. If a CRLF is observed during construction activities in the creek, activities will cease and USFWS will be notified. Construction activities will not commence until the CRLF leaves the project site and an exclusion fence is installed to prevent the movement of frogs back into the construction area. Relocation of CRLF will only take place by an individual permitted by USFWS to handle this species.

- A County construction inspector shall be on site to monitor all construction occurring in water within Weber Creek for compliance with the project's mitigation measures. A USFWS approved qualified biologist will be available during the construction period. The County construction inspector will assist the construction personnel, as needed, to comply with all project implementation restrictions and guidelines. Furthermore, the County construction inspector will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources.
- El Dorado County will implement best management practices (BMPs) to prevent impacts to water quality in Weber Creek.

Foothill yellow -legged frog (FYLF; *Rana boylei*)

Protocol surveys for CRLF were conducted in the project area. FYLF were not observed in the project area during the protocol CRLF surveys. The project area is outside the dispersal area of known populations in El Dorado County which are over 8 miles away. The avoidance and minimization measures described for CRLF will also protect FYLF.

Northwestern Pond Turtle (NWPT; *Clemmys marmorata marmorata*)

NWPT is a state species of concern. This species was not observed during biological surveys. Breeding habitat is unlikely to occur on the project because the steep banks are too shaded. Foraging habitat is present in Weber Creek. The avoidance and minimization measures described for CRLF will also protect NWPT.

Migratory Birds and Birds of Prey

Fish and Game Code 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Birds of prey include raptors, falcons, and owls. Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. The MBTA applies to construction activities and construction-related disturbance.

Although no nests were observed during surveys of the project area, a nest could become established in or near the project area before construction begins. Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Construction is scheduled to occur between 15 April and 15 October, which overlaps the nesting season of many birds. The nesting season is generally 1 February through 31 August.

Mitigation Measure BIO-2

The following avoidance and minimization measures will be implemented to protect Migratory Birds and Birds of Prey:

Swallows: Measures shall be taken to prevent establishment of cliff swallow nests prior to construction. Techniques to prevent nest establishment include the following:

- The contractor shall visit the site weekly and remove partially completed nests using either hand tools or high pressure water; or
- Hang netting from the existing bridge before nesting begins. If this technique is used, netting should be in place from late February until bridge demolition occurs.

Birds of Prey and other Birds Protected by the Migratory Bird Treaty Act

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests. If a nest becomes active after construction has started, then the bird is considered adapted to construction disturbance.
- If construction is scheduled to begin between 1 February and 31 August then a qualified biologist shall conduct a preconstruction survey for active nests at the construction site and within 250 ft of the construction site from publicly accessible areas within 30 days prior to construction. If no active nest of a bird of prey or MBTA bird is found, then no further mitigation measures are necessary.
- If an active nest of a bird of prey or MBTA bird is found, then the biologist shall flag a minimum 250-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest.
- The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. The size of suitable buffers depends on the species of bird, the location of the nest relative to the Project, project activities during the time the nest is active, and other project specific conditions.

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? **Potentially Significant Impact Unless Mitigation Incorporated.**

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, the California Fish and Game Code, or the Clean Water Act. Sensitive habitats in the project area include 4.013 ac of canyon live oak forest, 0.624 acre of white alder - Oregon Ash riparian woodland, 0.206 acre of Weber Creek, and 0.060 of intermittent and ephemeral channel. Impacts to Weber Creek and the intermittent/ephemeral channel are discussed under question c below.

Canyon Live Oak Forest

Approximately 1.462 ac of canyon live oak forest will be temporarily disturbed due to construction. The Project will result in the permanent loss of 0.636 ac of canyon live oak forest. An estimated total of 101 native trees five inches diameter at breast height (dbh) or greater would be removed from the canyon live oak forest (Sycamore Environmental 2010). Native trees removed include approximately 38 interior live oaks, 39 canyon live oaks, 7 black oaks, 3 blue oaks, 11 California buckeyes, and 1 Ponderosa pine. The final tree removal determination will be made by El Dorado County Department of Transportation (DOT).

The El Dorado County Oak Woodland Management Plan governs the conservation of native oaks in the County. The Management Plan states that when oak canopy removal is necessary to complete County capital improvement projects, such projects are exempt from the canopy retention and replacement standards. This exemption applies to road widening and realignments which are necessary to increase capacity, to protect the public's health, and to improve the safe movement of people and goods in existing public road rights-of-way, as well as acquired rights-of-way necessary to complete the Project.

As this Project is a component of the capital improvement plan and is necessary to increase capacity, protect the health, and to improve the safe movement of people and goods in existing public road rights-of-way as well as acquired rights-of-way necessary to complete the Project, the Project meets the exemption criteria. No compensatory mitigation is required for this upland biological community.

White Alder-Oregon Ash Riparian Forest

A total of 0.366 ac of white alder-Oregon ash riparian forest will be temporarily disturbed due to Project construction. The Project will result in the permanent loss of 0.145 ac of white alder-Oregon ash riparian forest. A total of 0.086 ac of the riparian forest permanent impacts and 0.266 ac of the riparian forest temporary impacts occur within the OHWM, outside the low flow channel, of Weber Creek. The final tree removal determination will be made by El Dorado County DOT.

Up to four utility poles will be relocated to the south side of Green Valley Road into a new PUE. It is anticipated that the trees within the new PUE will be removed. One of the trees to be removed in the new PUE is in the white alder-Oregon ash riparian forest. Bridge repair and construction are exempt pursuant to County General Plan Policy 7.3.3.4 concerning riparian and wetland buffer and setback requirements (El Dorado County 2004). The removal of the one tree in the riparian forest is subject to the conditions of the DFG 1602 Streambed Alteration Agreement. Implementation of BIO-1 will reduce potential impacts to white alder-Oregon ash riparian forest in the project area to a level of less than significant.

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? ***Potentially Significant Impact Unless Mitigation Incorporated.***

Weber Creek: Weber Creek is a potential Central Valley drainage hardhead/ squawfish stream, Central Valley drainage resident rainbow trout stream, and Sacramento-San Joaquin foothill/ valley ephemeral stream. These stream communities are considered sensitive resources by the DFG.

RSP will likely be placed around the new abutments and wing walls to stabilize the banks of Weber Creek. There will be 0.005 ac of permanent impacts to the low flow channel of Weber Creek as a result of placement of RSP. The Project will result in the temporary disturbance of 0.184 ac to the low flow channel of Weber Creek. Permanent and temporary impacts outside the low flow channel and within the ordinary high watermark are reported as impacts to the white alder – Oregon ash riparian forest. A total of 0.086 ac of the riparian forest permanent impacts and 0.266 ac of the riparian forest temporary impacts occur within the OHWM, outside the low flow channel, of Weber Creek. Temporary impacts to Weber Creek will occur a) when water is diverted through the project area, b) when the temporary creek crossing is constructed, c) when work occurs in the dewatered channel bed, and d) when vegetation is cleared.

Impacts to wetlands and waters may be permitted under Section 404 Nationwide 23 permit, a Section 401 Water Quality Certification, and a DFG 1600 Streambed Alteration Agreement. These permits will be obtained prior to commencement of construction. The bid specifications and contract will specify that the contractor will comply with the terms and conditions outlined in the permits.

These permits require revegetation of the temporarily disturbed areas of the bed and bank of Weber Creek. Additionally, implementation of BIO-1 will ensure that impacts to Weber Creek are less than significant.

Channel 1: CH 1 flows through the canyon live oak forest. The culverts in CH 1 under Green Valley Road will be extended to accommodate the widened road. Approximately 120 ft of CH 1 on the west side of Green Valley Road, south of Karma Lane, will be realigned and placed in a rock-lined ditch. The realignment and placement of CH 1 in a rock-lined ditch will permanently impact the functions and values of CH 1, although CH 1 will still exist. During construction, the southern end of CH 1 will be temporarily diverted through a pipe at the temporary creek crossing. The construction of the new alignment of Green Valley Road will result in 0.020 ac of permanent impacts and 0.020 ac of temporary disturbance to the intermittent portion of CH 1. Implementation of BIO-1 will ensure that impacts to CH 1 are less than significant.

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? ***Less Than Significant.***

The project area is located within a County-designated Important Biological Corridor (IBC). Policy 7.4.2.9 of the El Dorado County General Plan identifies and protects areas designated as an IBC. The IBC overlay applies to lands identified as having high wildlife habitat values because of extent, habitat function, connectivity, and other factors. Applicable provisions in the policy include no hindrances to wildlife movement (El Dorado County 2004).

The intent and emphasis of the Open Space land use designation and of the non-disturbance policy is to ensure continued viability of contiguous or interdependent habitat areas and the preservation of all movement corridors between related habitats. The new bridge will have a wider space between abutments. The new bridge will increase the hydraulic opening which will reduce the existing high flow velocities and decrease backwater. The increased width between abutments will improve the terrestrial wildlife movement corridor in the project area. The Project will not result in impacts to wildlife movement within the IBC.

Construction of the project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the project area. Daytime construction activities will result in minimal disruption of nocturnal wildlife movement. Although construction disturbance may temporarily hinder wildlife movements within the project area, the impact is less than significant due to its short-term nature and because the increased bridge length will result in an improved wildlife corridor upon completion of the project.

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

The El Dorado County Oak Woodland Management Plan governs the conservation of native oaks in the County. The Management Plan states that when oak canopy removal is necessary to complete County capital improvement projects, such projects are exempt from the canopy retention and replacement standards. This exemption applies to road widening and realignments which are necessary to increase capacity, to protect the public's health, and to improve the safe movement of people and goods in existing public road rights-of-way, as well as acquired rights-of-way necessary to complete the Project.

As this Project is a component of the capital improvement plan and is necessary to increase capacity, protect the health, and to improve the safe movement of people and goods in existing public road rights-of-way as well as acquired rights-of-way necessary to complete the Project, the Project meets the exemption criteria.

The Plan does call for the County to minimize, where feasible, the impacts to oaks through the design process and right-of-way acquisition for such projects. The design of this Project has used avoidance to the best extent feasible. Therefore, the Project is not in conflict with the local policy.

Nevertheless, the preferred alternative would result in the removal of approximately 96 protected oaks, including one located within the riparian zone along Weber Creek. The Project proposes to mitigate for the oaks removed from the riparian areas along Weber Creek by planting replacement trees (Mitigation Measure BIO-1).

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? *Less Than Significant.*

The Project is consistent with the Oak Tree Management Plan as it meets the criteria for exemption from the plan because it consists of a capital improvement project necessary to increase capacity, protect the health, and to improve the safe movement of people and goods in existing public road rights-of-way as well as acquired rights-of-way necessary to complete the Project. The County is in the process of preparing an Integrated Natural Resources Management Plan (INRMP). The plan is has not been adopted as of June 2011.

V. CULTURAL RESOURCES—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

Environmental Setting

The Project is located in the western portion of El Dorado County 0.6 mi west of the town of Placerville. It is situated in the transition zone between the eastern edge of the Sacramento Valley and the rolling western foothills of the Sierra Nevada mountain range. The project area spans Weber Creek approximately 3 miles southeast of the South Fork of the American River, into which the creek eventually drains approximately 12 air miles to the west.

The region surrounding the project area is underlain by Paleozoic and Mesozoic metamorphic rock with pockets of Mesozoic granites predominantly to the east. Important mineral-bearing rocks, such as gold and platinum, are located where metamorphic rocks and granite contact (Tremaine 2008). El Dorado County is rich with mineral-bearing deposits that were mined extensively during the historic period.

Potential Environmental Effects

a) **No Impact.** An intensive pedestrian survey and records search were conducted in support of the Archeological Survey Report (ASR). No historic resources were discovered in the project area (Tremaine 2008). Bridge 25C-0088 does not qualify for listing on the California Register and is not a historical resource for the purposes of compliance with CEQA (Mead & Hunt 2011).

b) **Less Than Significant.** No prehistoric cultural resources were discovered in the project area (Tremaine 2008). There is the possibility of accidental archaeological discoveries during construction-related ground-disturbing activities. This is considered a less-than-significant impact because the Project would implement County policies and state law to protect archaeological resources. These policies include stopping all work in the vicinity of the discovered resources and requiring that a professional archaeologist complete a determination of their significance prior to resuming any work in the area of the discovery.

c) **No Impact.** Paleontological resources in El Dorado County are associated with limestone cave deposits, occurrences of the Mehrten formation, and Pleistocene channel deposits (El Dorado County 2004a). Because these resources do not occur in the project area, no impact will occur. The site does not contain any other unique geologic features.

d) **Less Than Significant.** The ASR for this Project documents that no known cemeteries or burials occur within the project study area (Tremaine 2008). Should human remains be discovered during the excavation portion of the Project, the project description includes contract provisions that will require notification of the El Dorado County DOT and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94 et seq.

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<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 checked="" type="checkbox"/>	<input 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"/>

Environmental Setting

Regional Geology: El Dorado County is located in the Sierra Nevada geomorphic province of California, east of the Great Valley province and west of the Range and Basin provinces. Steep-sided hills and narrow rocky stream channels characterize the Sierra Nevada province. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciations and additional volcanic activity are factors that led to the east-west orientation of stream channels. (El Dorado County 2004).

The southwestern foothills of El Dorado County are composed of rocks of the Mariposa Formation that include amphibolite, serpentine, and pyroxenite. The northwestern areas of the county consist of the Calaveras Formation, which includes metamorphic rock such as chert, slate, quartzite, and mica schist. The higher peaks in the County consist primarily of igneous and metamorphic rocks with granite intrusions, a main soil parent material at the higher elevations (El Dorado County 2004).

Seismicity: Seismicity is defined as the geographic and historical distribution of earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Based on historical seismic activity and fault and seismic hazards mapping, El Dorado County is considered to have relatively low potential for seismic activity, and is located beyond the highly active fault zones of the coastal areas of California. The County's fault systems and associated seismic hazards are described below (El Dorado County 2004).

Fault Systems: Earthquakes are associated with the fault systems in a particular area. The distribution of known faults in El Dorado County is concentrated in the western portion of the county, with several isolated faults in the central county area and the Lake Tahoe Basin. Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust. The project area is located on the East Bear Mountains Fault. The section of East Bear Fault in the project area is classified as a well-located Pre-Quaternary (inactive) fault (El Dorado County 2004).

Soils: Soils on the west slope of El Dorado County consist of well-drained silt and gravelly loams divided into two physiographic regions, the Lower and Middle Foothills and the Mountainous Uplands. There are a total of eight soil associations in western El Dorado County.

Mapped soil units on the project site are Diamond Springs very fine sandy loam, 9 to 15% slopes, and Diamond Springs very rocky very fine sandy loam, 3 to 50% slopes (NRCS 1974).

Potential Environmental Effects

a-i) **No Impact.** No earthquake fault zones are mapped in El Dorado County. Therefore, the Project will not rupture a fault mapped on the most recent Alquist-Priolo Earthquake Fault Zoning Map. No impacts are anticipated.

a-ii) **No Impact.** The Project is not in a seismic hazard zone (State of California Department of Conservation 2010). No impacts are anticipated.

a-iii) **No Impact.** Liquefaction occurs in deposits of water-saturated alluvium or similar deposits of artificial fill. Soils in the project area are not subject to liquefaction. No impacts are anticipated.

a-iv) **No Impact.** Slopes on the site will be stabilized. The risk for seismic slope instability is low for stabilized slopes. No impacts are anticipated.

b) **Less Than Significant.** The Project would require grading of approximately 3 acres. The Project description states that the construction contract would stipulate that the contractor must construct the Project in accordance with the County’s Grading Ordinance and Storm Water Management Plan for Western El Dorado County. The contractor must prepare a construction-related Storm Water Pollution Prevention Plan (SWPPP), consistent with section 402 of the Clean Water Act, and construction activities will include implementation of stormwater runoff best management practices (BMPs) identified in the SWPPP. Application of these requirements and measures would prevent substantial erosion or topsoil loss. Following construction, all disturbed areas not paved would be revegetated consistent with measures identified in the El Dorado County Erosion Control and Revegetation Plan to ensure long-term soil stabilization.

c) **No Impact.** The project area is underlain by granitic to dioritic bedrock of Mesozoic age (Lloyd et. al., 1983). Soils on the site have a low shrink-swell potential and none are susceptible to landslide, lateral spreading, subsidence, liquefaction, or collapse (NRCS 1974). No impacts are anticipated from unstable soil.

d) **No Impact.** Soils in the project area have a low shrink-swell potential. Construction of the improvements would include the addition of aggregate base below the road surface that would reduce potential impacts from soil expansion and contraction.

e) **No Impact.** The proposed Project is a surface transportation project, not a residential, commercial, or industrial development project. Neither septic tanks nor alternative wastewater disposal systems are part of the Project.

VII. HAZARDS AND HAZARDOUS MATERIALS—Would the project:	<i>Potentially Significant</i>	<i>Potentially Significant</i>	<i>Less Than Significant</i>	<i>No Impact</i>
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	<i>Impact</i>	<i>Unless Mitigation Incorporated</i>	<i>Impact</i>	
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

Regulatory Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a Federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed. (California Code of Regulations, Title 22, Section 66261.10)

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity. CCR, Title 22, Sections 66261.20-66261.24 define the aforementioned properties. The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese List", includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. In addition, the El Dorado County Environmental Management Department (EMD) maintains records of

toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) keeps files on hazardous material sites.

Most hazardous materials regulation and enforcement in El Dorado County is overseen by the El Dorado County EMD, which refers large cases of hazardous materials contamination or violations to the RWQCB and the State DTSC. Other agencies, such as the El Dorado County AQMD and the Federal and State Occupational Safety and Health Administrations (OSHA), may also be involved when issues related to hazardous materials arise.

Environmental Setting

Youngdahl Consulting Group, Inc. conducted a Phase I Environmental Site Assessment (ESA) to evaluate the current and historical conditions of the subject property to identify recognized environmental conditions in connection with the site. A recognized environmental condition is defined as the presence of or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products even under conditions in compliance with laws (Youngdahl 2008).

The ESA concluded that there are no identified recognized environmental conditions. The rationale used for this opinion are the observations made during the site visit, the review of aerial photographs, and interviews with knowledgeable persons which corroborate the conclusion that the subject property is currently a right-of-way, bridge, Weber Creek, and rural residential property (Youngdahl 2008).

Potential Environmental Effects

a) ***Less Than Significant.*** Small amounts of hazardous materials would be used during construction activities (i.e., equipment maintenance, fuel, solvents, roadway resurfacing and re-striping materials). Hazardous materials would only be used during construction of the Project, and any hazardous material uses would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would have a less-than-significant impact.

b) ***Less Than Significant.*** The proposed Project would result in a less than significant impact associated with the use and potential accidental release of hazardous materials during construction (see item “a”, above).

c) ***No Impact.*** The nearest schools to the Site are Indian Creek and Charter Community Schools, which are located approximately 1.5 miles west of the project site. As noted above, the Project would involve the short-term handling of hazardous materials during construction. Handling and storage of hazardous materials during construction would comply with all applicable local, state, and federal standards.

d) ***No Impact.*** No hazardous material listed sites occur in project area (Youngdahl 2008).

e) ***No Impact.*** The Project is not located in an Airport Land Use Plan area or in the vicinity of an airport. The nearest airport to the project area is the Cameron Park Airport located approximately 7 miles southwest of the project area.

f) ***No Impact.*** The Project is not located in the vicinity of a private airstrip.

g) ***Less Than Significant.*** The County will maintain two-way traffic on the existing bridge for a majority of the bridge, western wall, eastern wall and western road construction. It will be necessary to provide only a continuous, single lane of controlled traffic with a temporary signal, or full closure of Green Valley Road bridge, during construction of the eastern road. Traffic control signs will be placed at Missouri Flat, Forni Road and Mallard Lane to detour traffic onto Hwy 50. Additionally, other minor operations may require temporary closures or full closures for short-term durations. The full closure may last for up to four months but would reduce the overall amount of construction time. The County will prepare a traffic

control plan in conjunction with the engineering plans. Project construction activities would be coordinated with local law enforcement and emergency services providers.

h) **No Impact.** The Project will not result in a new or increased exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

VIII. HYDROLOGY AND WATER QUALITY—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

Environmental Setting

The Project is located in the Weber Creek Subbasin of the South Fork American hydrologic unit (hydrologic unit code 18020129). Seasonal surface runoff is conveyed through the project site via roadside ditches. Bridge 25C-0088 and a portion of the approaches are mapped in the 100-floodplain (FEMA 1983).

Potential Environmental Effects

a) **Less Than Significant.** The bridge replacement will not violate water quality or waste discharge requirements. Water quality objectives will be met through adherence to construction provisions, precautions, and stipulations as described in the NPDES permit, Section 404 CWA permit, Section 401

Water Quality Certification, and 1602 Streambed Alteration Agreement. Coverage under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity will be obtained. In accordance with the provisions of the General Permit, the County will require the contractor to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to reduce or minimize discharge of pollutants from construction activities.

- b) **No Impact.** The Project would not involve any withdrawals from an aquifer or groundwater table.
- c) **Less Than Significant.** Roadside drainage ditches may require realignment within the project area to accommodate the modified road alignment. The Project would not alter the course of Weber Creek or substantially alter drainage patterns on the project site. Weber Creek would retain its approximate function and capacity at the completion of the Project. The banks of Weber Creek will be revegetated as described in the Biological Resources section.
- d) **No Impact.** The Project would not alter the course of Weber Creek or substantially alter drainage patterns within the Project area that would cause flooding on- or off-site.
- e) **Less Than Significant.** The replacement of Bridge 25C-0088 would not provide additional sources of runoff compared with the existing bridge. The increase of impervious surface area resulting from construction of the new bridge and approaches is not expected to contribute to a substantial increase in water runoff from the site. Water quality during Project construction will be protected by adherence to construction provisions, precautions, and stipulations as described in the NPDES, Section 404, Section 401, and 1602 Streambed Alteration Agreement permits.
- f) **No Impact.** No additional impacts other than those discussed above are anticipated.
- g) **No Impact.** The Project is a roadway improvement project, and no housing development is associated with the Project.
- h) **Less Than Significant.** The Project proposes replacement of a bridge with abutments that are currently located within the 100-year flood zone. Removing the existing bridge abutments and widening the constricted portion of the channel to match the upstream and downstream conditions will result in less backwater and lower water surface elevations upstream of the system (HDR Engineering 2008).
- i) **No Impact.** The Project is within the Weber Creek Dam Failure Inundation Zone. The Project will not expose people to higher levels of risk involving flooding. General Plan Policy 6.4.2.2 protects the life and property of County residents below dams by not allowing new critical or high occupancy structures (e.g., schools, hospitals) to be located within the inundation area resulting from failure of dams. The bridge is not a critical or high occupancy structure.
- j) **No Impact.** The Project is not in an area subject to seiche or tsunami.

IX. LAND USE AND PLANNING—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The applicable land use plan in the project area is the 2004 El Dorado County General Plan. Land use in the area surrounding the Project includes medium-density rural residential.

Potential Environmental Effects

- a) **No Impact.** The Project involves modifications to an existing roadway and bridge. The Project will not divide a community.
- b) **No Impact.** The Project would not conflict with any 2004 General Plan goals, policies or objectives intended to mitigate potential environmental impacts. The Project is identified in the El Dorado County Department of Transportation’s 2010 Capital Improvement Program (project number 77114; <http://co.el-dorado.ca.us/dot/cip.html>).
- c) **Less Than Significant.** The El Dorado County General Plan requires the County to prepare an Integrated Natural Resources Management Plan (INRMP) that identifies important habitat in the County and establishes a program for effective habitat preservation and management. The INRMP is still in process it is not anticipated to be adopted until after this Project has been completed.

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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"/>

Environmental Setting

El Dorado County is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, gold in particular, are considered the most significant extractive mineral resources. No mineral extraction activities occur on or in the vicinity of the project site.

Potential Environmental Effects

- a) **No Impact.** The Project is not within or adjacent to any important mineral resource areas as identified by the State of California; therefore, the Project would not impact the availability of mineral resources that would be of value to the state.
- b) **No Impact.** The Project is not within or adjacent to any important mineral resource areas as identified by El Dorado County (El Dorado County 2004b); therefore, the Project would not impact the availability of mineral resources that would be of value to the region.

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
XI. NOISE—Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 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 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"/>

Environmental Setting

The July 2004 El Dorado County General Plan Public Health, Safety, and Noise Element establishes policies and standards for noise exposures at noise sensitive land uses. The relevant policies are listed below:

Policy 6.5.1.9 Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 at existing noise-sensitive land uses.

General Plan Table 6-1 is included on the following page.

Table 4. Maximum allowable noise exposure for transportation noise sources (General Plan Table 6-1).

TABLE 6-1 MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES			
Land Use	Outdoor Activity Areas¹ L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn} /CNEL, dB	L_{eq}, dB²
Residential	60 ³	45	--
Transient Lodging	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 ³	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

¹ In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

- A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;
- B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant; and
- C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

An Environmental Noise Analysis was prepared for the Project by Brown-Buntin & Associates, Inc (2011). The Environmental Noise Analysis evaluates the existing and future noise levels at multiple receiver sites (existing structures) in the project area (Figure 4). Table 5 summarizes the results of the Environmental Noise Analysis.

Table 5. Existing and predicted future traffic noise levels for the proposed project.

Receiver	Existing Exterior Noise Level, dB Ldn	Future Exterior Noise Level, dB Ldn		Difference, dB (Future Project versus No Project)	Applicable GP Policy 6.5.1.12 Criteria	Significant if increase is greater than	Significant per GP Policy 6.5.1.12
		No Project	Project				
1	60.3	63.4	62.9	-0.5	6.5.1.12.B	3 dBA Ldn	No
3	60.1	63.2	58.3	-4.9	6.5.1.12.B	3 dBA Ldn	No
7	63.6	66.6	63.9	-2.7	6.5.1.12.C	1.5 dBA Ldn	No
8	70.0	73.0	69.1	-3.9	6.5.1.12.C	1.5 dBA Ldn	No
12	62.9	66.0	65.4	-0.6	6.5.1.12.C	1.5 dBA Ldn	No
15	64.6	67.6	67.1	-0.5	6.5.1.12.C	1.5 dBA Ldn	No
16	62.6	65.7	65.0	-0.7	6.5.1.12.C	1.5 dBA Ldn	No
20	55.8	58.8	58.9	+0.1	6.5.1.12.A	5 dBA Ldn	No
23*	60.3	63.3	65.9	+2.6	6.5.1.12.B	3 dBA Ldn	No
25	66.9	69.9	69.3	-0.6	6.5.1.12.C	1.5 dBA Ldn	No

* Adjacent to southwest corner of house at ground level.

The existing (current) noise levels at all receivers, except Receiver 20, are either very close to or exceed the 60 dB Ldn County standard. Predicted future noise levels for all receiver locations under the no project alternative, except Receiver 20, exceed the 60 dB Ldn County standard. The project has lower predicted future noise levels than the no project alternative, except at Receiver 20 and 23. The predicted future noise levels at Receiver 20, with and without the project remain below 60 dB L_{dn} and do not exceed the General Plan Policy 6.5.1.9 threshold. The predicted future noise levels at Receiver 20 with project construction remain below 60 dB L_{dn} and do not exceed the General Plan Policy 6.5.1.9 threshold.

The maximum predicted increase in exterior noise level, between the no project alternative (baseline condition) and project alternative, is +2.6 dB Ldn at Receiver 23. The primary structure at Receiver 23 is a two level house on a sloping hill, with the main (upper) floor accessed from the front, or driveway side of the house. An exterior deck, built on the first (ground) floor, extends into the back yard. At Receiver 23 the deck located on the ground level is considered the outdoor activity area. Traffic noise measurements at the southwest corner of the house were made at five feet above ground level, at or slightly above the elevation of the exterior deck (outdoor activity area). The project's predicted future noise level at Receiver 23 at the first (ground) floor is 65.9 dB Ldn. Mitigation is required to reduce noise impacts at Receiver 23's primary outdoor activity area and comply with General Plan Policy 6.5.1.9.

A project that exceeds the noise levels specified in General Plan Policy 6.5.1.9 (as listed in General Plan Table 6-1) must mitigate for the additional increase in noise. The County noise standard (as per Table 6-1) applicable to primary outdoor activity areas of residential uses is 60 dB Ldn. The County noise standard also provides that where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the County standard (45 dB Ldn).

County General Plan Policy 6.5.1.11 outlines standards for daytime construction and would apply to construction-related noise associated with the Project. General Plan Policy 6.5.1.11 notes that night time construction activities are allowed if it can be shown that nighttime construction activities would alleviate

traffic congestion and safety hazards. The significance of noise impacts associated with operation of transportation facilities is normally measured using General Plan Policy 6.5.1.12, which takes into account the existing (ambient) noise environment. Because the Project is not capacity increasing and would not result in an increase of the number of vehicles passing through the roadway corridor, the ambient condition is not expected to change as a result of the Project.

The analysis determined that the predicted changes in traffic noise exposures at the ten receivers due to the Project would not exceed the significance threshold under General Plan Policy 6.5.1.12. The proposed Project is consistent with General Plan Policy 6.5.1.12. At most receivers, the project results in a lower traffic noise environment compared to the future no project alternative.

GENERAL NOISE REDUCTION TECHNIQUES

Interior noise can be modeled by determining exterior noise levels and applying a reduction factor based on window or façade type. Interior noise levels are generally assumed to be 20 to 25 dB Ldn lower than exterior noise levels with closed windows. For interior noise, dual pane windows may be installed. Dual pane windows typically provide noise reduction values ranging from 30 to 44 dB whereas single pane windows range from 24 to 30 dB (FHWA 1977).

Significant reductions in tire noise emissions may be attained in certain circumstances by using alternate pavement materials. Alternate pavement materials use different binder materials and/or different mixes of particle size in asphalt concrete. A thin (about one inch) surface layer of open-graded asphalt concrete (OGAC) or rubberized asphalt has been demonstrated to reduce traffic noise due to tire/roadway interaction by 3 to 6 dB (Mestre Greve Associates 1992; Acoustical Analysis Associates Inc. 1992). In the *I-80 Davis OGAC Pavement Noise Study* an average noise reduction of at least 4.0 dB was observed at a distance of approximately 475 ft from the treated portion of I-80 (Illingworth & Rodkin, Inc. 2005). Typical auto speeds ranged from 67 to 71 mph, while truck speeds ranged from 60 to 65 mph (Illingworth & Rodkin, Inc. 2005). In a study conducted by the Washington State Department of Transportation (WSDOT), open-graded asphalt rubber surface was 3.3 dB quieter than conventional Class ½ inch hot mix asphalt (HMA) approximately one year after installation (WSDOT 2007). The posted speed limit in the study reach for the State of Washington Study is 60 mph.

General Plan Policy 6.5.1.3 states that use of noise barriers shall be considered a means of achieving the noise standards *only* after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings. Suitable materials for a sound barrier would include 2-inch (nominal) thickness wood, a 4-inch thick wood stud wall with wood paneling or stucco on both sides, or clear acrylic or laminated glass panels. These materials could be combined to create a partition topped with clear panels.

Potential Environmental Effects

a) Construction-related Noise

Less Than Significant. Construction activities could increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, time of day, and similar factors. These increases would be temporary. Daytime construction would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11, and any nighttime work would be allowed if nighttime construction activities would alleviate traffic congestion and safety hazards. Given that the Project contractor would adhere to applicable County construction-related noise standards, this impact is considered less than significant.

Traffic-related Noise

Potentially Significant Unless Mitigation Incorporated. Noise mitigation measures must be incorporated into the project. The measures could include alternative pavement materials or installation of sound barriers.

Construction of the proposed Project would result in an exterior noise level of approximately 65.9 dB at the lower (ground) floor exterior deck (outdoor activity area) at Receiver 23. The use of alternative

pavement on Green Valley Road within the project limits would reduce the exterior noise level at the Receiver 23 outdoor activity area by approximately 3 dB. The 3 dB reduction would provide an exterior noise level of approximately 62.9 dB at the Receiver 23 outdoor activity area. If alternate pavements are not used to reduce the noise levels at Receiver 23, sound could be blocked by barriers at the receiver. For exterior noise at the backyard deck of Receiver 23, a sound wall could be constructed to provide a reduction of 5 dB.

The predicted exterior noise level at Receiver 23 at the lower (ground) floor would be 65.9 dB Ldn under the proposed project. Without mitigation, the interior noise level threshold of 45 dB Ldn could be exceeded. The use of alternative pavement on Green Valley Road within the project limits would reduce the noise level by approximately 3 dB which would reduce interior noise levels at the lower (ground) floor to 42.9 dB Ldn.

Traffic noise levels at elevated receivers such as second or third stories may be 2 to 3 dB higher than at ground level, due to reduced ground absorption of traffic noise (Brown-Buntin Associates, Inc. 2011). Therefore, the interior noise level on the main (upper) floor of Receiver 23 following use of alternative pavement on Green Valley Road within the project limits could be approximately 45.9 dB (42.9 dB + 3 dB). This exceeds the 45 dB interior residential noise level allowed under General Plan Policy 6.5.1.9. At Receiver 23, main (upper) floor windows facing Green Valley Road will be replaced with acoustically treated dual pane windows to reduce interior noise levels to 45 db or less on the main (upper) floor. The use of alternative pavement on Green Valley Road within the project limits and replacement of the main (upper) floor windows facing Green Valley Road at Receiver 23 represents the practical application of the best-available noise reduction measure and will reduce project impact to less than significant and bring the Project into compliance with General Plan Policy 6.5.1.9.

Mitigation Measure NOISE-1

The following measures will be implemented to reduce the noise impacts at Receiver 23 (7301 Green Valley Road):

- Resurface Green Valley Road in the project limits with alternate pavement materials and replace the main (upper) floor windows facing Green Valley Road with acoustically rated, dual pane windows.
- Or, construct a noise barrier at 7301 Green Valley Road that is at least 6-feet high around the backyard deck and replace the all (upper and lower) floor windows facing Green Valley with acoustically rated, dual pane windows.

b) ***Less Than Significant.*** Project construction includes activities, such as operation of large pieces of equipment (e.g., heavy trucks), which may result in the periodic, temporary generation of groundborne vibration. Because the Project would not expand the roadway or change the way in which it is used, an increase in groundborne vibration associated with use of the road would not change from the current condition. Given the nature of any potential groundborne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

c) ***Less Than Significant.*** Because the Project is not traffic-inducing or growth inducing and would not change the way in which the roadway is used, the Project would not contribute to a substantial permanent increase in the ambient noise level in the project vicinity.

d) ***Less Than Significant.*** Construction activities would increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases would be temporary. Daytime construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11, and any nighttime work would be allowed if nighttime construction activities would alleviate traffic congestion and safety hazards. Because the Project contractor would be required to comply with applicable County construction-related noise standards, this impact is considered less than significant.

e) **No Impact.** The Project is not located within an airport land use plan area or within two miles of a public or public use airport.

f) **No Impact.** The Project is not located within the vicinity of a private airstrip.

XII. POPULATION AND HOUSING—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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"/>

Environmental Setting

The area surrounding the Project consists primarily of medium-density rural residential dwellings.

Potential Environmental Effects

a) **No Impact.** The Project will not induce population growth either directly or indirectly because the Project does not involve road extensions or expansion of infrastructure in a populated area.

b) **No Impact.** The Project does not involve the displacement of any housing.

c) **No Impact.** The Project does not involve the displacement of people.

XIII. PUBLIC SERVICES—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?

Environmental Setting

The El Dorado County Sheriff provides general public safety and law enforcement services. The El Dorado County Fire District and the Diamond Springs-El Dorado Fire Protection District provide fire protection services and emergency services. The County maintains public facilities including the project area roadways.

Potential Environmental Effects

a–e) **No Impact.** Replacement of Bridge 25C-0088 would not increase human presence in the area. No new or physically altered governmental facilities would be needed.

XIV. RECREATION:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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"/>

Environmental Setting

There are no recreation facilities within or adjacent to the proposed project area.

Potential Environmental Effects

- a) **No Impact.** The Project would not increase the use of existing parks in the area and does not include the construction of any recreational facilities.
- b) **No Impact.** The Project does not include the construction of any recreational facilities and would not require the expansion of existing recreational facilities.

XV. TRANSPORTATION/TRAFFIC—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or 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 checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Green Valley Road listed as a 2-lane regional road on the El Dorado County General Plan Circulation Map (El Dorado County 2004b).

Potential Environmental Effects

a) **Less than Significant.** Replacement of Bridge 25C-0088 would not change the amount of traffic on Green Valley Road because it is not a new development or growth inducing project. The number of through lanes on Green Valley Road would remain the same. Temporary closure of Green Valley Road during project construction could result in a temporary increase in traffic at the U.S. 50/Missouri Flat interchange.

b) **No Impact.** The bridge replacement would not change the amount of traffic on Green Valley Road.

c) **No Impact.** The Project would not result in a change in air traffic patterns.

d) **No Impact.** The Project includes features intended to improve safety of Green Valley Road (e.g., removing an existing curve with a tight radius, upgrading the road geometry). The Project would not include design features such as sharp curves, dangerous intersections, or turning radii that would increase hazards. Because uses of the roadway and surrounding areas would not change, it would likewise not result in any use incompatibility.

e) **Less Than Significant.** The project contractor would be required to prepare a Traffic Management Plan for construction activities to ensure adequate access for emergency vehicles during project construction. Following construction, the Project would result in improved safety and operation on Green Valley Road.

f) **No Impact.** Parking along Green Valley Road and the other roadways within the project area is prohibited. The Project would not result in an increase in demand for parking in the vicinity of the Project.

g) **No Impact.** This section of Green Valley Road is not proposed as a bike route (El Dorado County 2005). No other roads within the project limits are designated as a bike path (www.edctc.org/_bikeped_edc_plan.htm).

XVI. UTILITIES AND SERVICE SYSTEMS—Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input 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"/>

Environmental Setting

El Dorado County maintains the storm drainage facilities within the project area. El Dorado Irrigation District (EID) blow-off and water service occur within the project area. Telephone service lines occur within the Project limits. Construction of the new bridge and realignment of Green Valley Road will require relocation of these facilities.

Potential Environmental Effects

- a) ***No Impact.*** The Project would not produce additional wastewater, and therefore, would not exceed the applicable wastewater treatment requirements.
- b) ***No Impact.*** The Project would not increase the demand on existing water or wastewater treatment facilities.
- c) ***Less than Significant.*** Realignment of Green Valley Road will require a reconfiguration of the roadside drainage system within the project area. The reconfigured facilities will retain approximately the same capacity as the existing system. Both the existing and the reconfigured facilities drain to Weber Creek.
- d) ***No Impact.*** The Project would not require water service.
- e) ***No Impact.*** The Project would not produce wastewater.
- f) ***No Impact.*** Solid waste generated by the Project would be limited to construction debris, including asphalt and concrete, generated by the excavation of existing roadway and construction of the proposed improvements. Solid waste disposal would occur in accordance with federal, state, and local regulations.

Disposal would occur at permitted landfills. Therefore, the Project would not generate the need for new solid waste facilities.

g) **No Impact.** The Project would conform to all applicable state and federal solid waste regulations.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Potentially Significant Unless Mitigation Incorporated.** Through the use of Best Management Practices and the mitigation measures noted previously, the Project will not degrade the quality of the environment.
- b) **Less than Significant.** The construction of the Phase 1B improvements for the U.S. 50/Missouri Flat Interchange Project began in 2010 and should be completed in 2011. The improvements include the widening of the eastbound and westbound bridges on U.S. 50 over Weber Creek. The Project will not result in cumulatively considerable impacts.
- c) **Less than Significant.** The Project is intended to provide safety improvements to Green Valley Road within the project area and would result in beneficial effects. The Project would not result in substantial direct or indirect adverse effects from noise, either during project operation or construction, nor would it result in impacts to air quality, water quality, or utilities and public services. Therefore, the Project would not cause substantial adverse effects on human beings.

4. DETERMINATION

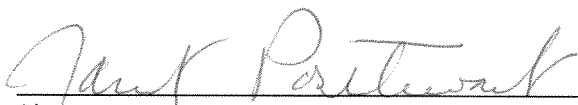
4.1 Environmental Factors Potentially Affected

This Initial Study has determined that in the absence of mitigation the proposed Project could have the potential to result in significant impacts associated with the factors checked below. Mitigation measures are identified in this Initial Study that would reduce all potentially significant impacts to less-than-significant levels.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Population and Housing |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Hydrology and Water Quality | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> None Identified |

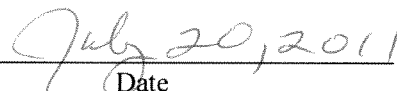
On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section III have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the Project MAY have a "Potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Name and Title: Janet Postlewait, Principal Planner



Date

5. REPORT PREPARATION AND REFERENCES

5.1. Report Preparation

El Dorado County Department of Transportation – CEQA Lead Agency

Jennifer Maxwell, P.E.	Senior Civil Engineer
Dustin Harrington, P.E.	Associate Civil Engineer
Janet Postlewait	Principal Planner

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Jeffery Little	Project Manager, Vice President
Adam Forbes, M.S.	Botanist/ Biologist
David Chapman, M.A.	Environmental Analyst
Aramis Respall	CAD/GIS Analyst

Tremaine & Associates, Inc. – Cultural Resource Assessment

Kim Tremaine	Principal Investigator (Archaeology)
Dwight Simons	Archaeologist

Mead & Hunt, Inc. – Historical evaluation of Bridge 25C0088

Chad Moffett	Principal Investigator
Carol Roland	Senior Historian

Brown-Buntin Associates, Inc. Environmental Noise Analysis

Jim Buntin	Principal Consultant
------------	----------------------

5.2. References

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APPENDIX A

Mitigation Monitoring and Reporting Plan

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Mitigation Monitoring and Reporting Plan
for the
Green Valley Road Bridge (25C-088) at Weber Creek
Replacement Project

CEQA Lead Agency:
El Dorado County

Prepared: July 2011

Adopted by Board of Supervisors on: _____

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Introduction

Purpose

El Dorado County, in conjunction with the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), is proposing to replace the Green Valley Road Bridge crossing Weber Creek. The existing bridge is a 20-ft-wide, two-lane, concrete tee beam structure that provides access to residential areas outside the City of Placerville. The bridge was constructed in 1926 and has been identified by Caltrans as structurally deficient (sufficiency rating of 22.5). The bridge also does not meet current standards of roadway width. The bridge must be replaced because it cannot be rehabilitated. Associated improvements for the approaches and bridge include an improved horizontal alignment with a larger radius curve, improved vertical alignment, wider lanes and shoulders, and retaining walls. The new bridge will be located to the west of the existing bridge, which will be removed after completion of the project. The proposed project is shown on Figure 2.

As described in the IS/MND, the Project itself incorporates a number of measures to minimize adverse effects on the environment. The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant. This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that these mitigation measures are implemented in conjunction with the Project. El Dorado County DOT, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The County will designate a staff member to manage the MMRP. Duties of the staff member responsible for program coordination will include conducting routine inspections and reporting activities, coordinating with the Project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

California Public Resources Code Section 21081.6 and California Code of Regulations Title 14, Chapter 3, Section 15097 require public agencies to adopt mitigation monitoring or reporting plans when they approve projects under a MND. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of Project approval.

Format of This Plan

The MMRP summarizes the impacts and mitigation measures identified and described in the Project IS/MND. Each of the impacts discussed within this MMRP is numbered based on the sequence in which they are discussed in the IS/MND. A summary of each impact with the corresponding specific mitigation measures are provided. Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the mitigation, the timeframe for implementation, and the party responsible for monitoring the implementation of the measure.

Implementation of mitigation measures is ultimately the responsibility of DOT; during construction, the delegated responsibility is shared by DOT contractors. Each mitigation measure in this plan contains a “Verified By” signature line, which will be signed by the DOT Project manager when the measure has

been fully implemented and no further actions or monitoring are necessary for the implementation or effectiveness of the measure.

Impacts and Associated Monitoring or Reporting Measures

Impact AESTH-1: Potential impacts on the visual integrity of the project area.

Mitigation Measure AESTH-1: The following mitigation measure will be implemented to minimize the visual impact of the retaining walls.

- The four new retaining walls on both sides of the north and south bridge abutments will be given an aesthetic treatment (e.g., a “natural stone” look through the use of a rock gravity type wall or similar treatment).

Implementation: The County will include in the project design an aesthetic treatment on all four retaining walls at the new bridge abutments.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measure.

Timing: Pre-construction and Construction Phase

Verified By: _____ Date

County Project Manager

Impact BIO-1: Potential impacts on California red-legged frog (CRLF).

Mitigation Measure BIO-1: The County will implement the following avoidance and minimization measures to protect CRLF.

- In-water construction activities will occur from April 15 to October 15, subject to the Streambed Alteration Agreement, or before the onset of the rainy season, whichever occurs first. The rainy season is defined as a frontal system that deposits 0.25 inch or more of precipitation during one event in the area.
- Rock slope- protection (RSP) will be "1/4 ton" Class placed by Method B of the Caltrans Standard Specifications.
- RSP (1/4 ton, Method B) will be backfilled with native earth materials. Native material will be backfilled between the voids of the angular RSP and compacted to 85% using hand-tamping equipment.
- Native material soil will be placed in the RSP above the 5-year storm event (as determined by the HDR model).
- Only clean rock material shall be used for RSP.

- A toxic materials control and spill-response plan will be developed and implemented for the proposed Project.
- Throughout Project construction and implementation, hazardous materials will be stored at an approved storage facility located at least 100 ft from any surface waters. Refueling and vehicle maintenance will be performed at least 100 ft from receiving waters.
- Temporary orange construction barrier fencing (and sedimentation fencing in some cases) shall be installed around the construction areas.
- After Project completion, native riparian trees impacted or removed due to Project construction will be replanted at a 2:1 ratio (2 trees planted for every 1 tree removed) within the riparian zone in the Project area. Approximately forty-six native riparian trees will be planted for the estimated 23 native trees removed. The success criterion for the replacement trees is a 60 percent or greater establishment rate. Appendix G, Revegetation and Erosion Control Specifications and Appendix I, Compensatory Mitigation and Monitoring Plan of the NES describe the methods and criteria for replacement of trees in the Project area.
- A biological resources education program will be conducted for construction crews before Project implementation. The education program will include a brief review of special-status species that may occur in the project area (including life history, habitat requirements, and pictures of the species), the portions of the project area in which they may occur, and their legal status. The program will also cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted as appropriate for new personnel as they are brought on the job during the construction period. Restrictions and guidelines that must be followed by construction personnel are as follows:
 - Project-related vehicles shall observe posted speed limits on hard-surfaced roads and a 10 mi-per-hour speed limit on unpaved roads during travel in the project area;
 - Project-related vehicles and construction equipment shall restrict off-road travel to the designated construction area;
 - Night time construction adjacent to Weber Creek shall be minimized to the extent possible;
 - All food-related trash shall be disposed of in closed containers and removed from the project area at least once each week during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the project area;
 - No pets or firearms shall be allowed in the project area;
 - No rodenticides or herbicides shall be applied in the project area during construction activities;
 - To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel shall not service vehicles or construction equipment outside of designated staging areas;
 - Any worker who inadvertently injures or kills a CRLF or finds one dead, injured, or entrapped, shall immediately stop construction activities and report the incident to the biological monitor. The biological monitor shall immediately notify El Dorado County, who will provide verbal notification to U.S. Fish and Wildlife Service's (USFWS)

endangered species office in Sacramento, California, and to the local California Department of Fish and Game (CDFG) warden or biologist within 3 working days (it may not be practical to immediately halt some construction activities, such as the pouring of concrete. For these activities, more than 3 days may be required for notification so that the activity can be safely completed). El Dorado County shall follow up with written notification to USFWS and the CDFG within 5 working days.

- A preconstruction survey for CRLF shall occur within 48 hours prior to the start of construction activities within the riparian and aquatic habitat at Weber Creek. In the event that a CRLF is observed during the preconstruction survey, USFWS will be notified and the CRLF will be monitored until it leaves the project site. A qualified biologist will be present during clearing and grubbing activities in the riparian corridor. Clearing and grubbing of the brush and blackberry shrubs will be performed by hand or with hand tools. Mechanized vehicles will not be used to clear the brush. If a CRLF is observed during construction activities in the creek, activities will cease and USFWS will be notified. Construction activities will not commence until the CRLF leaves the project site and an exclusion fence is installed to prevent the movement of frogs back into the construction area. Relocation of CRLF will only take place by an individual permitted by USFWS to handle this species.
- A County construction inspector shall be on site to monitor all construction occurring in water within Weber Creek for compliance with the project's mitigation measures. A USFWS approved qualified biologist will be available during the construction period. The County construction inspector will assist the construction personnel, as needed, to comply with all project implementation restrictions and guidelines. Furthermore, the County construction inspector will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources.
- El Dorado County will implement best management practices (BMPs) to prevent impacts to water quality in Weber Creek.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction surveys and will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Pre-Construction, Construction, and Post-Construction Phases

Verified By: _____ **Date:** _____

County Project Manager

Impact BIO-2: Potential impacts on Migratory Bird and Birds of Prey.

Mitigation Measure BIO-2: The County will implement the following measures to minimize or avoid Project-related effects on nesting Migratory Bird and Birds of Prey.

Swallows: Measures shall be taken to prevent establishment of cliff swallow nests prior to construction. Techniques to prevent nest establishment include the following:

- The contractor shall visit the site weekly and remove partially completed nests using either hand tools or high pressure water; or
- Hang netting from the bridge before nesting begins. If this technique is used, netting should be in place from late February until bridge demolition occurs.

Birds of Prey and other Birds Protected by the Migratory Bird Treaty Act:

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests. If a nest becomes active after construction has started, then the bird is considered adapted to construction disturbance.
- If construction is scheduled to begin between 1 February and 31 August then a qualified biologist shall conduct a preconstruction survey for active nests at the construction site and within 250 ft of the construction site from publicly accessible areas within 30 days prior to construction. If no active nest of a bird of prey or MBTA bird is found, then no further mitigation measures are necessary.
- If an active nest of a bird of prey or MBTA bird is found, then the biologist shall flag a minimum 250-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest.
- The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. The size of suitable buffers depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project specific conditions.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction surveys and will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Pre-Construction Phase

Verified By: _____ Date

County Project Manager

Impact NOISE-1: Potential noise impacts.

Mitigation Measure NOISE-1: The County will following measures will be implemented to reduce the noise impacts at Receiver 23 (7301 Green Valley Road):

- Resurface Green Valley Road in the project limits with alternate pavement materials and replace the main (upper) floor windows facing Green Valley Road with acoustically rated, dual pane windows.
- Or, construct a noise barrier at 7301 Green Valley Road that is at least 6-feet high around the backyard deck and replace the all (upper and lower) floor windows facing Green Valley with acoustically rated, dual pane windows.

Implementation: The project design will include the selected measure.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measure.

Timing: Pre-construction Phase

Verified By: _____ Date

County Project Manager