Summary

NEPA Assignment

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 U.S. Code (USC) 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of five years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

The proposed project is a joint project by Caltrans and FHWA, and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Caltrans is the lead agency under NEPA and also under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC Section 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Under CEQA, impacts to each resource are individually evaluated and addressed for significance level. However, under NEPA the significance of the action as a whole is evaluated

through context and intensity of all combined impacts. Because NEPA is concerned with the significance of the project as a whole, often a “lower level” document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

Caltrans prepared a Draft EIR/EA, which was finalized on February 7th, 2018. The Draft Environmental Document (DED) was circulated to the public from February 13, 2018 to March 29, 2018 for review and comment. After circulating the DED and receiving comments from the public and reviewing agencies, this Final EIR/EA has been prepared. The alternatives presented in the Final Environmental Document (FED) include some modifications from those presented in the DED.

Caltrans received numerous comments on the DED that focused on the duration of construction and the loss of the existing bridge’s historic character. Based on the input received, Caltrans’ Project Development Team has generated the two options, the “Hybrid” Alternative and the ABC Alternative. These alternatives are based off the draft document’s Alternative 1-- Retrofit The Existing Bridge Along Current Alignment. Neither alternative introduces new significant impacts not previously discussed in the draft document.

This document includes responses to comments received on the Draft EIR/EA and has identified a preferred alternative, which is the “Hybrid” Alternative. Caltrans has decided to issue a Finding of No Significant Impact (FONSI) for compliance with NEPA. A Notice of Determination (NOD) will be published for compliance with CEQA, and a Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with EO 12372.

Introduction

Caltrans proposes to address the Saratoga Creek Bridge seismic and structural concerns, either by constructing a new bridge within the existing bridge or replacing the existing bridge with a new bridge. This final environmental document for the Saratoga Creek Bridge project evaluates one No Build and two Build Alternatives. The Alternatives evaluated in this final EIR/EA are as follows:

1. Alternative 1.1: Maintain Existing Roadway Alignment with “Hybrid” Bridge (Hybrid Alternative)

2. Alternative 1.2: Maintain Existing Roadway Alignment with New Accelerated Bridge Construction (ABC) Bridge (ABC Alternative)

3. Alternative : No Build Alternative

These alternatives were developed as a response to the public comments on the alternatives included in the draft EIR/EA. Discussion of those alternatives and how the “Hybrid” Alternative and ABC Alternative were developed are included in Section 1.6, Comparison of Alternatives.

Overview of the Project Area

State Route (SR-) 9 is a 38.6-mile-long highway that travels from SR-1 near the City of Santa Cruz to SR-17 in the Town of Los Gatos, traversing the Santa Cruz Mountains and passing through San Lorenzo Valley and the Saratoga Gap.

The majority of SR-9 is a rural, two-lane highway that passes through both Santa Clara County and Santa Cruz County in the State of California (Figure 1-1). From the Santa Cruz County line to the Los Gatos town limit, SR-9 is an officially designated State Scenic Highway and the remainder of SR-9 (from the Santa Cruz County line to SR-1) is eligible to be included in the State Scenic Highway System. The only urbanized portions of the route are through parts of the Town of Los Gatos, the City of Saratoga, and the City of Santa Cruz. The route also passes through four smaller communities: Redwood Grove, Brookdale, Ben Lomond, and Felton.

The proposed project would be constructed between post miles (PM) 4.75 and 4.9, along the officially designated State Scenic Highway segment of SR-9. This location is 0.5 mile west of the boundary of the City of Saratoga, next to the intersection of SR-9 and Sanborn Road. Near the intersection, east of Sanborn Road and south of SR-9, is Sanborn County Park (Figure 1-2). Sanborn Creek is located on the west side of Sanborn Road and crosses SR-9, approximately 25 feet west of the intersection. Sanborn Creek feeds into Saratoga Creek less than a mile downstream of the project site.

The existing bridge along SR-9 was constructed in 1902 as a two-span, earth-filled, concrete arch, with rubble masonry spandrel[1] walls. It has been deemed eligible for the National Register of Historic Places. The total length of the bridge is 146 feet. The width of the bridge consists of two 12-foot-wide lanes, for a total of 24 feet (from curb to curb), with no shoulders. The bridge has no pedestrian or bicycle accommodations. The average height of the bridge deck is approximately 40 feet from the creek bed of Sanborn Creek.

Purpose and Need

Project Purpose

The purpose of the project is to maintain safe and stable connectivity along SR-9, between the City of Saratoga in Santa Clara County and the community of Felton in Santa Cruz County.

Project Need

The need for this project results from the structural and seismic deficiencies in the existing Saratoga Creek Bridge (Bridge No. 37 0074). The need was determined in a 2004 Bridge Inspection Report by the Caltrans Office of Structures Maintenance and Investigations (Office of Structures Maintenance and Investigations 2004). This report determined that there were seismic and structural deficiencies in the bridge which could undermine the future ability of the structure to continue providing reliable traffic service.

In March 2011, Caltrans' Office of Structural Materials performed a subsequent in-depth geotechnical investigation to identify the material properties used to construct the existing bridge. A Bridge Inspection Records Information System (BIRIS) report was written based on the findings of this investigation (Division of Maintenance 2013).

The bridge inspection team found no evidence of bar-reinforcing steel at the bridge abutments[2] or at the pier[3]. The report also revealed that the material properties do not meet the strength and mechanical property standards for

[1] A spandrel is the triangular space between a side of the outer curve of an arch, a wall, and the ceiling or framework.
[2] A bridge abutment is the part of the bridge foundation that rests on the ground at either end of the bridge.
[3] A pier is the main support column for the span of the bridge deck that crosses between abutments.

current bridge design. The continued mortar joint deterioration and lack of reinforcement within the bridge make it susceptible to damage during a seismic event, particularly considering the close proximity of the bridge to the San Andreas fault system, located approximately half a mile away. Figure 1-3 shows the location of the bridge with respect to the San Andreas fault system.

Proposed Action

Caltrans proposes to address the Saratoga Creek Bridge's seismic and structural concerns by either constructing a new bridge within the existing bridge in a manner that preserves the look of the existing bridge or through the complete replacement of the existing bridge with a new bridge. The existing bridge provides a crossing for SR-9 over Sanborn Creek.

The "Hybrid" Alternative would construct a new bridge within the existing bridge while maintaining much of the original outer structure without modification. The ABC Alternative would replace the existing bridge with a new one on the same alignment as the existing bridge. The No-Build Alternative would not change the bridge and would only continue standard maintenance of the bridge.

The "Hybrid" Alternative has been selected as the preferred alternative because it meets the project's purpose and need of maintaining safe and stable connectivity along SR-9, while also retaining much of the visual aesthetics of the existing structure by avoiding the concealment or removal of the current bridge's stone masonry walls. This concern was a recurring public comment during circulation of the draft EIR/EA. This alternative also anticipates a shorter duration of construction and traffic management impacts in comparison to the ABC Alternative.

Both build alternatives require vegetation clearing in the immediate area around the existing bridge and will install a temporary creek crossing/diversion for Sanborn Creek below the intersection of SR-9 and the creek. Additionally, both build alternatives will also have an adverse effect on the historic designation of the bridge.

Table S-1 summarizes the potential environmental impacts that have been identified through the studies performed by Caltrans in the preparation of this document. This table covers permanent impacts from both construction and

operation of the proposed project. For a complete description of potential effects and recommended measures (including temporary construction effects), please refer to the specific sections within Chapter 2 and Appendix C of this document.

Construction Cost

This project is included in the 2017 Transportation Improvement Program and is proposed for funding from the 2017 State Highway Operation and Protection Program. The Transportation Improvement Program ID for this project is VAR170010. It is also included in the Metropolitan Transportation Commission's 2017 Regional Transportation Plan and the 2017 California Transportation Infrastructure Priorities.

- The estimated construction cost for the "Hybrid" Alternative is approximately $15,500,000. This construction cost does not include right of way acquisition costs.

- The estimated construction cost for the ABC Alternative is approximately $15,000,000. This construction cost does not include right of way acquisition costs.

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Land Use				
Existing and Future Land Use	No impact	No impact	No impact	None
Consistency with State, Regional, and Local Plans and Programs	No impact	No impact	No impact	None
Compatibility with habitat conservation plan	No impact	No impact	No impact	None
Located in a Coastal Zone	No impact	No impact	No impact	None
Located near Wild and Scenic Rivers	No impact	No impact	No impact	None
Parks and Recreational Facilities	No impact	No impact	No impact	None
Farmlands				
Farmland Acquisition	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Williamson Act Property Acquisition	No impact	No impact	No impact	None
Growth				
No effect				
Community Impacts				
Community Character and Cohesion	No impact	No impact	No impact	None
Relocations and Real Property Acquisition	No impact	No impact	No impact	None
Environmental Justice	No impact	No impact	No impact	None
Utilities/Emergency Services				
Utilities	No impact	Electrical and telephone utilities will be temporarily relocated	Electrical and telephone utilities will be temporarily relocated	None
Emergency Services	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Traffic and Transportation/Pedestrian and Bicycle Facilities				
Bicycle Facilities	No impact	Increased accessibility (permanent)	Increased accessibility (permanent)	None
Pedestrian Facilities	No impact	No impact	No impact	None
Traffic	No impact	No impact	No impact	None
Visual/Aesthetics				
Adverse effect on scenic views/damage scenic resources	No impact	Moderate due to tree removal, encasement of historic bridge, and bridge widening (permanent)	High due to tree removal, bridge widening (permanent), retaining wall installation (permanent), removal of historic bridge (permanent), and hillside cutting (permanent).	AMM Visual-1: Bridge aesthetic treatment.

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Degradation of existing visual character or quality	No impact	Moderate-High due to tree removal and bridge widening (permanent).	High due to tree removal, bridge widening (permanent), and retaining wall installation (permanent).	AMM Visual-2: Funding for mitigation planting. AMM VISUAL-1: Retaining wall aesthetic treatment.
Create a new source of light or glare	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Cultural Resources				
Create an adverse change in the significance of an historical resource	No impact	Substantial adverse change to Saratoga Creek Bridge through modification (permanent).	Substantial adverse change to Saratoga Creek Bridge through demolition (permanent).	AMM CULT-1: Historic American Building Engineering Record Survey (HAER) – Level II Documentation. AMM CULT-2: Digital Scan of Bridge. AMM CULT-3: Historical Narrative. AMM CULT-4: Campfire Program with Sanborn County Park. AMM CULT-5: Digital Content for Electronic Historic Platform(s).
Create an adverse change in the significance of an archaeological resource	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Disturbance to human remains	No impact	No impact	No impact	None
Hydrology and Floodplain				
No impact				
Water Quality and Stormwater Runoff				
Result in substantial drainage pattern alteration	No impact	>1 acre of new impervious surfaces will be added (permanent).	>1 acre of new impervious surfaces will be added (permanent).	AMM WATER-1: Water treatment BMPs. AMM WATER-2: Permanent water treatment BMPs.
Violation of water quality standards	No impact	No impact	No impact	None
Change to groundwater supply or groundwater recharge	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Substantially degrade water quality	Deposition and transport of sediment and vehicular-related pollutants (temporary)	Deposition and transport of sediment and vehicular-related pollutants (temporary).	Deposition and transport of sediment and vehicular-related pollutants (temporary).	AMM WATER-3: Stormwater pollution prevention plan. AMM WATER-4: Erosion prevention.
Geology/Soils/Seismic/Topography				
Expected likelihood of seismic related issues, including ground shaking and liquefaction	No impact	No impact	No impact	None
Expose people or structures to potential adverse effects	No impact	No impact	No impact	None
Mineral resources	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Paleontology				
Destruction of paleontological resources (e.g., fossil remains and sites) as a result of ground disturbance	No impact	Excavation in undisturbed areas may impact paleontologically sensitive geologic layers (permanent).	Excavation in undisturbed areas may impact paleontologically sensitive geologic layers (permanent).	AMM PALEO-1: Worker Paleontological Training.
Hazardous Waste/Materials				
No impact				
Air Quality				
No impact				
Noise				
No impact				
Energy				
No impact				

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Natural Communities				
Impacts to natural communities	No Impact	1.5 acres (permanent) 0.43 acre (temporary)	1.66 acres (permanent) 0.64 acre (temporary)	AMM BIO-1: ESA fencing. AMM BIO-2: Tree removal tally. AMM BIO-3: Tree replacement AMM BIO-4: Riparian habitat replacement.
Wetlands and Other Waters				
Impacts to jurisdictional waters of the U.S.	No impact	< 0.01 acre (permanent) 0.14 acre (temporary)	0.01 acre (permanent) 0.14 acre (temporary)	None
Plant Species				
Robust Spine Flower	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Animal Species				
Special status Bat Species	No impact	Potential to impact	Potential to impact	None
San Francisco Dusky-footed Woodrat	No impact	Potential to impact	Potential to impact	None.
Foothill Yellow-legged Frog	No impact	No impact	No impact	Also: AMM BIO-1, 3, & 4.
Western Pond Turtle	No impact	Loss of <0.01-acre of potential aquatic dispersal habitat from RSP placement (permanent) 0.18-acre of disturbance to potential aquatic dispersal habitat from creek diversion (temporary) Potential direct impacts to individuals	0.19-acre of disturbance to potential aquatic dispersal habitat from creek diversion (temporary) Potential direct impacts to individuals	Also: AMM BIO-1, 3, & 4.

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Special status Salamanders	No impact	0.19-acre of disturbance to potential aquatic habitat from RSP, tree removal (permanent) and creek diversion (temporary) 0.5 acres of disturbance to upland habitat from bridge widening and construction, RSP, and guardrail construction (permanent). 1.94-acre of disturbance to upland habitat from staging and utility relocation, temporary detour route, construction access road, and vegetation removal (temporary) Potential direct impacts to individuals	0.19-acre of disturbance to potential aquatic habitat from tree removal (permanent) and creek diversion (temporary) 1.49 acres of disturbance to upland habitat from bridge widening and construction; temporary construction access road; temporary detour route, and vegetation removal (permanent) 0.5-acre of disturbance to upland habitat from staging and utility relocation (temporary) Potential direct impacts to individuals	Also: AMM BIO-1, 3, & 4.

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Special status Fish Species	No impact	0.19-acre of disturbance to aquatic habitat from RSP, tree removal (permanent) and creek diversion (temporary) Potential direct impacts to individuals	0.19-acre of disturbance to aquatic habitat from tree removal (permanent) and creek diversion (temporary) Potential direct impacts to individuals	AMM BIO-7: Fish species relocation plan. Also: AMM BIO-1, 3, & 4.
White-tailed Kite	No impact	No impact	No impact	None
Long-eared Owl	No impact	No impact	No impact	None

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
California Red-legged Frog	No impact	0.19-acre of disturbance to aquatic dispersal habitat from RSP, tree removal (permanent) and creek diversion (temporary) 0.50 acres of disturbance to upland habitat from bridge widening and construction; and RSP (permanent) 1.94-acre of disturbance to upland habitat from bridge construction access, temporary construction detour route, vegetation removal, staging and utility relocation (temporary) Potential direct impacts to individuals	0.19-acre of disturbance to aquatic dispersal habitat from tree removal (permanent) and creek diversion (temporary) 1.49 acres of disturbance to upland habitat from bridge widening and construction; temporary construction access road; and vegetation removal (permanent) 0.50-acre of disturbance to upland habitat from staging and utility relocation (temporary) Potential direct impacts to individuals	AMM BIO-8: California red-legged frog work window and timing. AMM BIO-9: California red-legged frog compensatory mitigation ratio. AMM BIO-10: Biological Monitor. AMM BIO-11: Preconstruction surveys. AMM BIO-12: Protected species discovery. AMM BIO-13: Handling protected species. Also: AMM BIO-1, 3, & 4.
Invasive species				
No impact				

Table S-1: Project Potential Impacts

Environmental Topic	No Build Alternative	Build Alternative 1.1 "Hybrid" Alternative	Build Alternative 1.2 ABC Alternative	Avoidance, Minimization, and/or Mitigation Measures
Cumulative Impacts				
Cumulative Visual Impacts	No impact	No impact	No impact	None
Cumulative Biological Impacts	No impact	No impact	No impact	None