FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

ROBINSON CANYON ROAD BRIDGE SCOUR REPAIR PROJECT

MONTEREY COUNTY, CALIFORNIA

Lead Agency:
RMA - Public Works & Facilities
County of Monterey
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March 2018

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1.0 BACKGROUND INFORMATION

Project Title:	Robinson Canyon Road Bridge Scour Repair Project
File No.:	File No. 3851
Project Location:	The Robinson Canyon Road Bridge is located approximately 0.1 mile (mi) south of Carmel Valley Road and less than 0.1 mi north of Old Ranch Road in unincorporated Monterey County.
Name of Property Owner:	County of Monterey
Name of Applicant:	County of Monterey RMA - Public Works & Facilities
Assessor's Parcel Number(s):	169-091-048-000, 169-091-047-000, 169-131-006-000, 169-131-015-000, 416-522-005-000, 416-522-021-000, and 416-024-013-000.
Acreage of Property:	6.08 acres within the Project Area
General Plan Designations:	Commercial, Public/Quasi-Public, Residential – Low Density 5 – 1 Acres/Unit, Resource Conservation, Rivers and Water Bodies
Zoning:	Light Commercial (LC) with the following combining districts: Historical Resources District (HDR), Design Control District (D), Site Plan Review District (S), and Residential Allocation District (RAZ). Low Density Residential (LDR)/1 - D – S – RAZ. Low Density Residential (LDR)/2.5 - D – S – RAZ. Open Space (O) – D – S - RAZ Public/Quasi-Public (PQP) - D – S.
Lead Agency:	County of Monterey RMA - Public Works & Facilities

Prepared By:	LSA 285 South Street, Suite P San Luis Obispo, California 93401
Date Prepared:	March 16, 2018
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2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

The County of Monterey (County) RMA – Public Works & Facilities proposes to implement the Robinson Canyon Road Bridge Scour Repair Project (proposed project) to address existing scour issues by installing scour protection on the substructure of the Robinson Canyon Road Bridge (Bridge No. 44C-0017). The bridge identification information is listed below:

05-MON-0-CR
BHLO-5944(099)
Robinson Canyon Road Bridge; Co. No. 503, Caltrans Bridge Inventory #44C-017
Latitude: 36° 31' 15"
Longitude: 121° 48' 22"

The proposed project will be one hundred percent (100 %) funded by Federal Highway Bridge Program (FHBP) funding with toll credits.

2.1.1 Existing Facility

Robinson Canyon Road is an existing two (2) lane road (one [1] lane in each direction) with a concrete curb on the west side separating traffic from a five (5) foot (ft) wide sidewalk. The road is classified by the California Road System (CRS) Maps as a Major Collector. The Robinson Canyon Bridge crosses the Carmel River and was originally constructed in 1971. The bridge is located approximately eight (8) miles (mi) southeast of the City of Carmel by the Sea and 20 mi southwest of the City of Salinas. More specifically, the bridge is located approximately 0.1 mi south of Carmel Valley Road and less than 0.1 mi north of Old Ranch Road (refer to Figure 1, Vicinity Map and Figure 2, Project Area).

The existing bridge is 303 ft long and 35 ft, four (4) inches wide. The existing bridge is a three (3) span bridge with two (2) piers (Pier 2 and 3) and two (2) abutments (Abutment 1 and 4) (refer to Figure 3), Bridge General Plan).

As discussed in more detail below, there is existing scour at Abutment 1 and Pier 2. The available California Department of Transportation (Caltrans) maintenance reports dated May 23, 2006 and June 22, 2010 indicate that the bridge is generally in good condition other than the scour potential.

The existing bridge is not at risk for overtopping or inundation. A hydrologic analysis (Wreco Engineers, March 2016) shows that the available freeboard of the bridge (i.e. the distance between the bottom deck [soffit] of the bridge and the water surface elevation) is 5.9 ft for a 50-year storm and 4.5 ft for a 100-year storm. The available freeboard currently exceeds the Federal Emergency Management Agency (FEMA) and Caltrans hydraulic design criteria for designing bridges which recommends that there be at least two (2) feet of freeboard for a 50-year storm event.

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Figure 1: Vicinity Map

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Figure 2: Project Area

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Figure 3: Bridge General Plan

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2.2 PROJECT PURPOSE AND NEED

2.2.1 Purpose

The purpose of the proposed project is to install scour protection at the substructure of the bridge in order to reduce the potential for future scouring at the bridge foundations.

2.2.2 Need

A Caltrans scour review dated June 22, 2005 identified the Robinson Canyon Road Bridge as scour critical, indicating that the scour would erode the river bottom below the footings of Abutment 1 and Pier 2, and possibly to the pile tip during a major flood event. The scour review noted that embankment erosion at Abutment 1 was documented between 2000 and 2005 and an erosion hole and channel degradation at Pier 2 were documented between 1984 and 2005. However, based on cross channel measurements collected in 1979, 2004, 2005, 2006, and 2012 by routine Caltrans maintenance inspections, substantial changes to the channel elevation near Pier 2 have not occurred since 2006. The scour review did not identify erosion at Pier 3 or Abutment 4.

As a result of the findings of the scour review, the County submitted a Bridge Scour Plan of Action (POA) (September 30, 2009) to Caltrans. The Bridge Scour POA requires Caltrans Bridge Maintenance engineers to conduct biennial inspections to check for signs of degradation or bridge settlement, Caltrans Structure Maintenance & Investigations (S&I) and the Structure Hydraulic Branch to conduct annual bridge inspections, County Maintenance personnel to monitor the bridge during storm events, and the Monterey County Water Resources Agency (MCWRA) to inspect the bridge deck for signs of foundation settlement during storm events that exceed 17,300 cubic feet per second (cfs). If a storm event exceeds 17,300 cfs, MCWRA must continue monitoring on a daily basis until flowrates subside below 17,300 cfs.

The extent of the existing bridge scour at Abutment 1, Pier 2 and Pier 3 is provided in Table 1 below. Short Term (Local) scour represents the predicted depth of scour that would occur during a 100-year storm event given the existing conditions. Long term scour represents the combined effects of degradation and contraction scour. Degradation scour occurs over long periods of time and can result in lowering of the streambed. Contraction scour occurs when water accelerates as it flows through an opening that is narrower than the channel upstream from the bridge.

Table 1: Scour Depths and Elevations for Existing Conditions without Scour Protection

Bridge Element	Channel Contraction Scour (feet)	Long-Term Degradation (feet)	Local Scour (feet)	Total Scour Depth (feet)[1]	Total Scour Elevation[2] (feet)
Abutment 1 (South)	1.7	6.0	13.0	20.7	88.5
Pier 2	1.7	6.0	12.8	20.5	88.7
Pier 3	1.7	6.0	6.1	13.8	95.4
Abutment 4 (North)	1.7	6.0	Not[3] Calculated	7.7	101.5

Source: WRECO 2016
Notes:
[1]The total scour depth is the sum of the contraction scour, long-term degradation, and the local scour.
[2] The total scour elevation references the existing channel thalweg elevation (i.e., the lowest elevation of the channel), which is 109.2 feet NAVD 88.
[3]No local scour was detected at Abutment 4 because the water surface is below the base of the abutment

Table 2 summarizes the scour depth that is predicted to occur at the abutments if scour protection is implemented.

Table 2: Scour Depths and Elevations for Proposed Conditions with Scour Protection

Bridge Element	Contraction Scour Depth (feet)	Long-Term Degradation (feet)	Local Scour Depth (feet)	Total Scour Depth (feet)[1]	Total Scour Elevation (feet)[2]
Abutment 1 (South)	1.9	6.0	13.2	21.1	88.1
Pier 2	1.9	6.0	6.6	14.5	94.7
Pier 3	1.9	6.0	6.1	14.0	95.2
Abutment 4 (North)	1.9	6.0	Not[3] Calculated	7.9	93.6

Source: WRECO 2016
Notes:
[1]The total scour depth is the sum of the contraction scour, long-term degradation, and the local scour.
[2] The total scour elevation references the existing channel thalweg elevation (i.e., the lowest elevation of the channel), which is 109.2 feet NAVD 88.
[3]No local scour was detected at Abutment 4 because the water surface is below the base of the abutment

2.3 PROJECT ALTERNATIVES

The proposed project includes evaluation of one Build Alternative and the No Build Alternative. The Build Alternative would install scour protection at Abutment 1, Pier 2 and Pier 3, and reinforce the channel banks along the Robinson Canyon Road Bridge.

2.3.1 No Build Alternative: No Action is Taken to Address Existing Scour Issues at Robinson Canyon Road Bridge

In the No Build Alternative, no scour protection would be installed and the Robinson Canyon Road Bridge would remain scour critical and at risk for continued erosion/scour, which would further compromise the structural integrity of the bridge.

2.3.2 Build Alternative: Install Scour Protection at the Substructure of the Robinson Canyon Road Bridge

The Build Alternative would require scour countermeasures at Abutment 1 and Pier 2 and Pier 3 (refer to Figure 3, General Plan and Figure 4a and 4b, Construction Details).

Abutment 1. To address erosion and scour at Abutment 1 and along the south bank of the Carmel River, an Articulated Concrete Block Mat (ACB), also known as a cellular concrete mattress, would be attached to the north side of Abutment 1, placed along the south side of the river bank, and tied into the proposed rock slope protection (RSP) at the south side of Pier 2. The ACB would be approximately 60 ft long and 87 ft wide. The ACB system at Abutment 1 would be backfilled with 1.0 ft of native material. The proposed project does not require modifications to the concrete pile cap or abutment piles at Abutment 1.

Pier 2 and Pier 3. To address erosion and scour at Pier 2 and Pier 3, RSP would be placed around Pier 2 and Pier 3. RSP at Pier 2 would extend 8.5 ft from the south side of Pier 2 to 7.5 ft north of Pier 2. The RSP at Pier 2 would be approximately eight (8) ft deep at the deepest point. The RSP at Pier 3 would extend five (5) ft from both the north and south side of the pile cap and would be approximately 5.5 ft deep at the deepest point. The RSP at Pier 2 and 3 would be backfilled with 1.0 ft of native material. Aside from the proposed scour countermeasures, the existing piers would not be modified as part of the proposed project.

Figure 4a: Construction Details

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Figure 4b: Construction Details

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Abutment 4. The proposed project does not include any modifications to Abutment 4.

Because the purpose of the proposed project is to implement scour protection at an existing bridge, outside of the proposed scour countermeasures, neither construction of new infrastructure nor modification of the bridge or roadway is proposed.

Table 2 summarizes the scour depths and elevations for proposed conditions with scour protection.

2.3.3 Construction Details

Scheduling. Construction is anticipated to begin during the spring of 2018 and be completed by spring of 2019, for a total construction duration of 12 months. Construction within the river will take approximately three and one half (3 ½) months (July 1 through October 15). Construction activities outside the river channel include clearing and grubbing, work on the abutment, and construction of the access road to the river. Construction activities within the river are planned to occur outside of the rainy season, when surface water within the Carmel River is at its seasonal minimum (July 1 through October 15).

Traffic Detours and Construction Signage. The Robinson Canyon Road Bridge will be open to public use during construction and no traffic detours will be required. Advanced and end-construction signage will be placed 350 ft from the temporary access road entrance and 350 ft past the construction area, respectively.

Dewatering. The Carmel River has perennial flow and is expected to be flowing within the project area year round. As discussed previously, construction within the river is planned to occur during the non-rainy season (between July 1 and October 15), when surface water within the Carmel River is at its seasonal minimum. Nevertheless, dewatering of the work area within the river will be required.

Two (2) temporary dams in the Carmel River, one (1) on each side of the existing bridge, would be installed for the duration of construction. Each dam would be wide enough to carry construction equipment and provide a contractor work area. Pipes would be installed in the river, passing through the dam structure, to dewater only the construction work area at the existing bridge while still allowing perennial flow to be conveyed within the portion of the river where no work is being done. After construction is complete, the contractor would remove the temporary dams and pipes and restore the river and disturbed areas to pre-construction conditions.

Construction Staging and Access. Materials and equipment that would be used during bridge construction would be staged at designated staging areas located throughout the project area (refer to Figure 5). As shown on Figure 5, two (2) staging areas are located on each side of the bridge, one on the north bank and one on the south banks of the river.

River access would be provided via a12-ft-wide and 327-ft-long temporary access road that would be constructed off of Robinson Canyon Road at the northwest corner of the bridge (refer to Figure 5). Approximately 250 cubic yards (CY) of fill would be required to construct the temporary access road on the north side of the river. It is anticipated that material will come from channel excavation used to embed the RSP at the piers and the ACB at Abutment 1 or be imported. The proposed project anticipates balancing all earthwork so that any imported soil material will be exported at the end of the project.

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Figure 5: Construction Staging Areas

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A temporary construction easement (TCE) would be required for the construction of the access road on the northwest side of Robinson Canyon Road Bridge. This TCE would include the grading limit of the access road and temporary staging areas. Due to the large temporary staging area and access road, it is anticipated that a TCE would be required on the entire parcel on the northeast side of the bridge (Assessor's Parcel Number [APN] 169-131-015-000). In addition to the parcel on the northwest side of Robinson Canyon Road Bridge, approximately 325 square feet (sf) on the northeast side of the bridge (APN 169-131-006-000), and approximately 400 sf of TCE on the southeast side of the bridge (APN 416-522-005-000) would be required to complete construction for the proposed project.

Utility Rerouting. Overhead electrical and telephone lines are located within the project area. Joint utility poles are located on the northwest, southwest and southeast corners of the bridge. Electrical overhead power lines cross Robinson Canyon Road on the south side of the bridge. These overhead power lines operated by Pacific Gas and Electric (PG&E) are high enough on the existing power poles, and would not be disturbed by the passing of construction equipment. Additional joint utility lines (telephone, cable, etc.) would be temporarily removed for passage of construction equipment. On the northwest side of the bridge where the proposed access road meets Robinson Canyon Road, just north of Abutment 4, the lower hanging fiber optic lines would need to be raised on the existing poles to provide clearance for equipment to access the temporary access road, however the utility poles themselves would not need to be relocated.

A single fire hydrant is located on the southwest approach to the bridge within the project area. The fire hydrant would not need to be relocated as part of the proposed project.

Construction Equipment. Typical excavators and earthmoving equipment would be utilized near and within the river channel. A crane would be required to place the large RSP for abutment, channel, and pier reinforcement. Construction equipment would travel along the length of the access road, perpendicular to the bridge, during construction.

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

The environmental factors checked below would be potentially affected by this Project, involving at least one (1) impact that is a "Less than Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☒ Transportation/Traffic	☐ Tribal Cultural Resources	☒ Utilities and Service Systems
☒ Mandatory Findings of Significance		

Some proposed applications that are not exempt from California Environmental Quality Act (CEQA) review may have little or no potential for adverse environmental impacts related to most of the topics in the Environmental Checklist; and/or potential impacts may involve only a few limited subject areas. These types of projects are generally minor in scope, located in a nonsensitive environment, and are easily identifiable and without public controversy. For the environmental issue areas where there is no potential for significant environmental impact (and not checked above), the following findings can be made using the project description, environmental setting, or other information as supporting evidence.

☐	Check here if this finding is not applicable.

Finding: For the above referenced topics that are not checked off, there is no potential for significant environmental impact to occur from either construction, operation, or maintenance of the proposed project, and no further discussion in the Environmental Checklist is necessary.

Evidence:

1. **Aesthetics:** The proposed project is a scour repair project, and implementation of the proposed project would not change portions of the bridge visible to motorists, bicyclists, or pedestrians along the roadway or bridge, or create visual changes to the environment.[1] Thus, implementation of the proposed project would not have an adverse effect on a scenic vista, damage scenic resources, degrade existing visual character or quality of the site and its

[1] The proposed project generated a score of 8 in the California Department of Transportation Questionnaire to Determine Visual Impact (VIA) Level. Scores that fall between 6 and 9 of the questionnaire indicate that no visual changes to the environment are proposed and no further analysis is required.

surroundings, or create a new source of substantial light or glare. The proposed project would have no impact on scenic resources or visual character.

2. **Agricultural and Forestry Resources:** The project area is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation. There are no existing Williamson Act contracts in the project area. In addition, the zoning designations in the project area do not include any agricultural, forestland, timberland, or timberland zoned Timberland Production uses. Implementation of the proposed project would have no impact on agricultural or forestry resources.

3. **Land Use and Planning:** The proposed project is within the boundaries of the Carmel Valley Master Plan, which is part of the Monterey County General Plan. The Carmel Valley Master Plan was adopted in 2010 and amended in 2013. The project area is currently designated Commercial, Public/Quasi-Public, Residential – Low Density 5 – 1 Acres/Unit, Resource Conservation, and Rivers and Water Bodies in the Carmel Valley Master Plan. The proposed project is a scour repair project, and would take place entirely within existing right-of-way. The areas proposed for temporary construction easements (TCEs) would not affect access to homes or businesses in the vicinity of the proposed project. The proposed project would not physically divide an established community.

   As stated above, the proposed project would be implemented entirely within existing right-of-way, albeit temporary construction easements would be necessary during construction activities but would not permanently impact any adjacent land uses identified in the Carmel Valley Master Plan. The Carmel Valley Master Plan requires that all new bridge construction or remodeling in Carmel Valley include provisions for pedestrians and bicyclists (Policy CV-2.4). Although the proposed project would remodel the Robinson Canyon Road Bridge over Carmel River, the proposed project is characterized as an infrastructure repair project; work on the bridge would be limited to implementing scour repair measures at and adjacent to the bridge substructure at Abutment 1, Pier 2, and Pier 3. No improvements would be made to components of the bridge where pedestrians and bicyclists could access (i.e., the bridge deck), and operation of the proposed project would not change the use of the roadway. The Carmel Valley Master Plan also outlines policies for preserving the rural character of specific roads by maintaining the roads as a two-lane road, including the portion of Robinson Canyon Road that falls within the project area. The proposed project is a scour repair project and would not change the rural character of Robinson Canyon Road beyond existing conditions. The proposed project is consistent with all applicable land use plans, policies, or regulations adopted, and no impacts would occur.

   The project area is not within the boundaries of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan. Implementation of the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved conservation plan, and no impacts would occur.

4. **Mineral Resources:** The proposed project is not located within an area classified as a Mineral Resource Zone**.** No mineral resources have been identified in the project area.

Implementation of the proposed project would not result in the loss of availability of any known mineral resources.

5. **Population and Housing:** The proposed project is a scour repair project, designed to reduce the potential for future scouring at the Robinson Canyon Road bridge foundations. The capacity of the road would not change, and no additional traffic would be generated upon completion of the proposed project. The proposed project does not include the construction of new housing nor would it cause an increase in the housing supply indirectly through increased demand for housing. Additionally, the proposed project would not cause an increase in the County's population, and would not result in direct or indirect growth-inducing effects. The proposed project would not displace existing housing or people because the proposed project would be implemented within the existing right-of-way. Implementation of the proposed project would not have an impact on population growth and housing.

6. **Public Services:** Fire services for the proposed project and the surrounding area are and would continue to be provided by the Mid Valley Station, Station 5, located in the Mid Carmel Valley area, of the Monterey County Regional Fire District. Police services for the proposed project and the surrounding area are and would be provided by the Coastal Patrol Station (Monterey) of the Monterey County Sheriff's Office. Public services are currently being provided to the project area. Implementation of the proposed project would install scour protection at the substructure of the Robinson Canyon Road Bridge, and would not increase the demand for fire and police services. Because the proposed project is an infrastructure repair project, it would not generate the need for additional schools, park space, or other public facilities in the project vicinity. Implementation of the proposed project would not have an impact on public services.

7. **Recreation:** The proposed project is a scour repair project, which would reduce the potential for future scouring at the bridge foundations. The capacity of the road would not change, and no additional traffic would be generated upon completion of the proposed project. The proposed project does not include the construction of new housing nor would it cause an increase in the housing supply indirectly through increased demand for housing. The proposed project would not generate an increased need for parks or recreational facilities. There are no existing parks or recreational facilities within the project area. Implementation of the proposed project would not have an impact on recreation, including neighborhood and regional parks or other recreational facilities.

8. **Utilities and Service Systems:**

   Wastewater. The proposed project does not involve uses requiring wastewater treatment. Wastewater generated during construction of the proposed project would be disposed of properly by the project contractor as required by the Construction General Permit. Operation of the proposed project would not generate wastewater that requires treatment subject to the requirements of the Regional Water Quality Control Board (RWQCB). The proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities.
   Water. The proposed project may result in a short-term demand for water during excavation, grading, and construction activities. Water demand during construction activities (e.g., dust

control) would be temporary. These uses would cease when construction is complete. Overall, construction activities require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Water use for construction would cease when construction is completed. The proposed project is a scour repair project, and operation of the proposed project would not require water and would not generate a new demand that would adversely affect long-term water supplies. The proposed project would not require or result in the construction of new water treatment facilities or expansion of existing facilities.

Stormwater Runoff. The proposed project would not require or result in construction of new storm water drainage facilities or require the expansion of existing facilities. Refer to Section 4.9, for a discussion of drainage associated with the proposed project.

Solid Waste. The proposed project would generate a nominal amount of construction waste that would require disposal in local landfills. Construction waste would be recycled as appropriate. The proposed project is a scour repair project and would not generate solid waste during project operation. The proposed project would not increase the demand for solid waste disposal (landfill service) facilities.

The construction and operation of the proposed project would not impact wastewater, water, stormwater runoff, and solid waste services. The proposed project would have no impact on utilities and service systems.

DETERMINATION. On the basis of this initial evaluation:

1. I find that the Project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

2. 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 revisions in the Project have been made by or agreed to by the Project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

3. I find the proposed Project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

4. I find that the proposed 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. ☐

5. I find that although the proposed 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. ☐

Project Planner	Date
Planning Manager	Date

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4.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to Projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
5. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration (Section 15063 [c][3][D]). In this case, a brief discussion should identity the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.
6. Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and Lead Agencies are free to use different formats; however, Lead Agencies should normally address the questions from this checklist that are relevant to a Project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 AESTHETICS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
(b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
(c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
(d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Proposed project construction and operation would not result in aesthetic impacts. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and aesthetics.

4.2 AGRICULTURE AND FOREST RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(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?	☐	☐	☐	☒
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Proposed project construction and operation would not result in agriculture or forest resources impacts. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and agriculture or forest resources.

4.3 AIR QUALITY

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
(b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
(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)?	☐	☐	☒	☐
(d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
(e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis:

The discussion and analysis provided in this section is based on air quality information obtained from the Monterey Bay Air Resources District (MBARD) as described below and air quality modeling conducted by LSA (January 2017). The air quality modeling worksheets are included in Appendix A. The MBARD regulates air quality in the project area. The MBARD area is in non-attainment for State ozone and particulate matter of 10 microns or less (PM_{10}).

a) **Conflict with or obstruct implementation of the applicable air quality plan?**
The proposed project is located in unincorporated Monterey County, within the jurisdiction of the MBARD, which regulates air quality in the North Central Coast Air Basin (NCCAB). Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature, and rainfall.

An air quality plan describes air pollution control strategies to be taken by counties or regions classified as nonattainment areas. The main purpose of an air quality plan is to bring a non-attainment area into compliance with the requirements of federal and State air quality standards. The air quality plan uses the assumptions and projections provided by local planning agencies to determine control strategies for achieving regional air quality compliance. The most recent MBARD plan for attaining California Ambient Air Quality Standards (AAQS) is the 2008 Air Quality Management Plan (AQMP). On April 17, 2013, the MBARD Board of Directors adopted the 2012 Triennial Plan Revision. The 2012 Triennial Plan Revision documents the MBARD's progress toward attaining the State ozone standard and is the MBARD's review and update to the 2008 AQMP. For a project in the North Central Coast Air Basin (California) (NCCAB) to be consistent with the AQMP, the pollutants emitted from the project must not exceed the MBARD significance thresholds or cause a significant impact to air quality.

Project construction emissions were analyzed using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RoadMod), Version 8.1.0.[1] The results of the modeling are summarized in Table 4.3-1. The estimated maximum project emissions during construction for PM_{10} were then compared to the MBARD threshold for construction-related emissions of PM_{10}. The MBARD does not have thresholds for construction-related emissions of other pollutants.

Table 4.3-1: Project Construction Emissions in Pounds per Day

	Total PM_{10}	
Maximum Project Emissions	7.0	
MBARD Threshold	82.0	
Exceed Threshold?	**No**	

Source: LSA, 2017.

Results, summarized in Table 4.3-1, were compared to the MBARD threshold for construction-related emissions of PM_{10}. As shown in Table 4.3-1, the proposed project would not exceed the MBARD threshold of significance for construction-related PM_{10} emissions. Additionally, emissions from construction equipment, such as dump trucks, excavators, bulldozers, compactors, and front-end loaders are accommodated in the emissions inventories of State- and federally-required air quality plans. Construction of the proposed project would not conflict with or obstruct the MBARD's existing AQMP. No mitigation is required.

The proposed project would install scour protection at the substructure of the bridge in order to reduce the potential for future scouring at the bridge foundations. The proposed project would not increase vehicle capacity, and would not result in increased emissions once operational. Operation of the proposed project would not conflict with or obstruct the MBARD's existing AQMP. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

b) **Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

Short-Term (Construction) Emissions. Construction activities would generate exhaust emissions from utility engines, on-site construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting construction

[1] The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RoadMod), Version 8.1.0 is an emissions model for linier projects and is approved for use by Air Districts in California including the MBARD.

crews. Exhaust emissions during construction would vary daily as construction activity levels change. Although the construction phase of the proposed project would result in a net increase in criteria pollutants such as carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb), the emission of these criteria pollutants would be temporary in nature, and would cease when construction is completed.

The MBARD has established a threshold of significance of 82 pounds per day for direct emissions of PM_{10} during construction activities. Additionally, the MBARD has identified a level of construction activity above which a project could result in significant temporary impacts if not mitigated. Projects with minimal earthmoving have a threshold of potential significance of 8.1 acres per day and projects with earthmoving (grading, excavation) have a threshold of 2.2 acres per day. In other words, construction of projects with activity below the acreage thresholds are assumed to be below the 82 lbs/day threshold of significance. The MBARD does state that this threshold should be used for screening purposes and does not represent a definitive threshold of significance.

The proposed project has a total project area of 0.50 acres (0.25 acres for the bridge repairs and 0.25 acres for the access road), and would have a daily construction activity area well under the screening size threshold of 2.2 acres per day. Additionally, as shown in Table 4.3-1, project emissions would be well below the PM_{10} threshold for construction related emissions.

The proposed project would not exceed the MBARD threshold of significance for construction-related PM_{10} emissions. Construction of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and impacts would be less than significant. No mitigation is required.

Long-Term (Operational) Emissions. The proposed project would install scour retrofits at the substructure of the bridge in order to reduce the potential for scour damage to the existing bridge pier foundations. The proposed project would not result in an increase in trip generation or existing vehicle use within the project area. Operation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and impacts would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

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)?

As discussed in Response 4.3 b) above, and as shown in Table 4.3-1, construction of the proposed project would not cause a substantial increase in ozone and PM_{10}, the two (2) criteria pollutants for which the region is in non-attainment under an applicable federal or State ambient air quality standard. Construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in non-attainment and impacts would be less than significant. No mitigation is required.

The proposed project would install scour retrofits at the substructure of the bridge in order to reduce the potential for scour damage to the existing bridge and would not result in an increase in trip generation or existing vehicle use within the project area. Operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment and impacts would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

d) **Expose sensitive receptors to substantial pollutant concentrations?**

Sensitive receptors include residences, schools, playgrounds, childcare centers, convalescent centers, retirement homes, and athletic fields. The project site is surrounded by low- to medium-density residential land uses, school facilities, a church, a golf course, and commercial retail. Multiple sensitive receptors are located within a few hundred feet of the project site. Construction activities can expose sensitive receptors to airborne particulates and fugitive dust as well as a small quantity of construction equipment pollutants (i.e., diesel-fueled vehicles and equipment). However, due to the fact that construction would take place for only a short period of time (approximately four [4] months) and in a very small geographic area, the minimal emissions estimated for construction activities (see Table 4.3-1), sensitive receptors would not be exposed to substantial pollutant concentrations as a result of project construction. Construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. No mitigation is required.

The proposed project would install scour retrofits at the substructure of the bridge in order to reduce the potential for scour damage to the existing bridge. Once operational, the proposed project would not result in an increase in trip generation or existing vehicle use within the project area. The proposed project would not result in increased pollutant concentrations in the region than those existing without the proposed project. Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

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

Odor complaints are most commonly associated with agricultural land uses, wastewater treatment plants, food processing plants, chemical plans, composting, refineries, and landfills. During construction of the proposed project, objectionable odors may emanate from the operation of diesel-powered construction equipment. These odors, however, would be temporary and limited to the proposed project area.

Residential receptors are located approximately 300 feet from the closest proposed construction areas of the proposed project. Odors may be detectable at the residence; however, due to rapid dispersion of emissions that would occur with distance from the source and because odors during construction would be temporary, construction of the proposed project would not be expected to result in objectionable odors affecting a substantial number of people during project construction and impacts would be less than significant. No mitigation is required.

The proposed project would install scour retrofits at the substructure of the bridge in order to reduce the potential for scour damage to the existing bridge and would not change or increase existing uses within the project area. Objectionable odors would not be emitted during the operation of the proposed project. The operation of the proposed project would not create objectionable odors affecting a substantial number of people and impacts would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

4.4 BIOLOGICAL RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(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?	☐	☒	☐	☐
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
(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?	☐	☒	☐	☐
(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?	☐	☒	☐	☐
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Impact Analysis:

The analysis provided in this section is based on the Natural Environment Study (LSA, May 2017), provided in Appendix B. For the purpose of the Biological Resources Section, the project area is referred to as the Biological Study Area (BSA), and encompasses the project footprint and adjacent areas that may be directly or indirectly affected by the proposed project.

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

The 6.08 ac BSA is at an elevation ranging from approximately 115 to 150 ft and includes the braided channel of the Carmel River, an adjacent floodplain and terraces to the north and to the south. The river and flood plain are wooded and undeveloped. The northern terrace consists of mowed grassland and a parking area. The southern terrace is comprised of a residential yard, a church parking lot with ruderal vegetation, and portions of a golf course. The surrounding terraces gently slope toward the river. The BSA is surrounded by residences, ranchette residences, a church, and a golf course.

The following electronic databases and agency communications were reviewed for species that could potentially occur within the vicinity of the BSA:

- California Natural Diversity Data Base *Rarefind 5* (CNNDB)(2017)
- California Native Plant Society (CNPS) *Online Inventory of Rare and Endangered Plants* (2017)
- U.S. Fish and Wildlife Service (USFWS) letter titled "List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project" dated January 23, 2017.
- National Marine Fisheries Service (NMFS) official species list dated January 23, 2017.

A general biological field survey was conducted in April 2015 to assess the biological condition of the BSA for the presence of various special-status biological resources, including plants, wildlife, and habitat suitability for special-status species. In addition, LSA conducted an onsite rare plant survey (April, May and July 2015), a habitat assessment for California red-legged frog (April 2015), a jurisdictional delineation (April 2015), and a follow-up nighttime survey for California red-legged frog and bats (July 2016).

Based on the database review and professional knowledge of species that may occur in the region, 54 special-status plants have the potential to occur within the records search area (i.e., Carmel Valley, Marina, Monterey, Mount Carmel, Salinas, Seaside, Soberanes Point, and Spreckeles 7.5-Minute United States Geologic Survey (USGS) quadrangles) (refer to Table 7 of the Natural Environment Study [NES], which is provided in Appendix A). Although the visual assessment suggested that suitable habitat may be present in the BSA for some special-status plant species, no special-status plants were observed during the protocol level surveys for rare plants. Special-status plant species are not expected to occur in the BSA and they are not discussed further.

Twenty-one special-status animal species have the potential to occur within the records search area. Of the 21 special status animal species, only the following five (5) species have suitable habitat present in the BSA and are discussed below: California red-legged frog (*Rana draytonii*), South/Central California Coast Steelhead (*Oncorhynchus mykiss irideus*), Western pond turtle (*Emys marmorata*), two-striped garter snake (*Thamnophis hammondii*), and Monterey big-eared woodrat *(Neotoma macrotis Luciana)*. In addition, California red-legged frog was observed in the BSA during the nighttime field survey. Monterey big-eared woodrat nests were observed within the BSA in the riparian habitat along the north side of the Carmel River. No steelhead, Western pond turtles, or two-striped garter snakes were observed during the field surveys, although suitable habitat is present for these species.

California Red-Legged Frog. California red-legged frog is a federally-listed threatened species and a State species of concern. The BSA lies within designated critical habitat for California red-legged frog. California red-legged frog was observed in the BSA during a nighttime field survey, although tadpoles were not observed. The BSA provides California red-legged frog with foraging, hydration, breeding, and larval development habitat. Construction of the proposed project including dewatering activities, construction access, and staging would result in 0.16 ac of temporary impacts to aquatic breeding and non-breeding habitat. Installation of rock slope protection would result in permanent impacts to 0.06 ac of aquatic breeding and non-breeding

habitat. Construction access and staging would also result in 1.43 ac of temporary impacts and 0.17 ac of permanent impacts to upland habitat. Because the proposed project would result in temporary and permanent impacts to California red-legged frog habitat, formal and informal consultation with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Federal Endangered Species Act would be required prior to construction. **Mitigation Measures BIO-1 through BIO-9** require preconstruction surveys, construction employee training, ESA fencing, monitoring, removal of invasive species, and revegetation. In addition, **Mitigation Measures PBO-1 through PBO-19** from the *Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program* (8-8-10-F-58) (PBO) would be implemented to reduce adverse effects to California red-legged frog and their habitat. Implementation of **Mitigation Measures BIO-1 through BIO-9** and PBO-1 through PBO-19 would reduce impacts to California red-legged frog and its critical habitat to a less than significant level.

Two-Striped Garter Snake. The two-striped garter snake is a State species of concern. No two-striped garter snakes were observed during general field surveys of the BSA. However, suitable habitat for this species occurs within the BSA in the riparian and riverine habitat of the Carmel River. The dense canopy and deep shade within the BSA reduces the value of the project site to garter snakes because there are no basking sites. Construction of the proposed project including dewatering, construction access and staging would result in temporary impacts to 0.23 ac of aquatic habitat. Installation of rock slope protection would result in permanent impacts to 0.09 ac of aquatic habitat. Construction access and staging would also result in temporary impacts to 1.41 ac and permanent impacts of 0.09 ac to upland habitat. **Mitigation Measures BIO-1 through BIO-7** require preconstruction surveys, construction employee training, ESA fencing, monitoring, and removal of invasive species. Implementation of **Mitigation Measure**s BIO-1 through BIO-7 would reduce impacts to the two-striped garter snake to a less than significant level.

Western Pond Turtle. The western pond turtle is a State species of concern. No pond turtles were observed during surveys of the BSA; however, Carmel River within the BSA provides suitable aquatic and upland habitat for western pond turtle. There are no basking sites in the BSA due to the dense shade provided by the closed canopy which reduces the habitat value to a dispersal/movement corridor. Construction of the proposed project including dewatering, construction access, and staging would result in temporary impacts to 0.23 ac of aquatic habitat. Installation of rock slope protection would result in permanent impacts to 0.09 ac of aquatic habitat. Construction access and staging would also result in temporary impacts to 1.41 ac and permanent impacts of 0.09 ac of upland habitat. **Mitigation Measures BIO-1 through BIO-8, WQ-1, and PBO-8** require preconstruction surveys, construction employee training, ESA fencing, monitoring, removal of invasive species, revegetation, preparation of a SWPPP and implementation of construction BMPs, and restoration of habitat contours. Implementation of **Mitigation Measures BIO-1 through BIO-8, WQ-1, and PBO-8** would reduce impacts to the western pond turtle to a less than significant level.

Monterey big-eared woodrat. The Monterey big-eared woodrat is a California species of special concern. This small mammal typically occurs in shrublands and forests including riparian woodlands and constructs large conspicuous stick nests. Several woodrat nests were found within the riparian vegetation in the northwest portion of the BSA. This vegetation will be cleared in order to provide access to the scour repair area. Clearing vegetation containing woodrat nests would impact woodrat foraging habitat and could destroy nests as well as directly kill individual woodrats.

Mitigation Measures BIO-1 through BIO-7 require preconstruction surveys, construction employee training, ESA fencing, monitoring, and removal of invasive species. In addition, **Mitigation Measure BIO-10** require woodrat nest surveys prior to vegetation removal. If woodrat nests are located within the work area, they would be moved out of the work area to allow woodrats to reoccupy them outside of the work area. Implementation of Mitigation Measures **BIO-1 through BIO-7 and BIO-30** would reduce impacts to Monterey big-eared woodrat to a less than significant level.

South-Central Coast Steelhead DPS. The South/Central California Coast Steelhead Distinct Population Segment (DPS) is a federally-threatened species and a State species of concern. The BSA lies within designated critical habitat for South/Central California Coast Steelhead DPS; however, South/Central California Coast Steelhead require gravelly substrates for spawning, and the reach of the Carmel River running through the BSA is comprised of sandy soils, providing unsuitable spawning habitat for this species. BSA supports juvenile migration and adult migration corridors and may also support juvenile rearing areas. Due to high water temperatures in the Carmel River during the time of construction (July 1 – October 15), it is unlikely that steelhead would be present within the BSA.

Construction of the proposed project including dewatering activities, construction access, and staging would result in temporary impacts to 0.16 ac of steelhead habitat. Additionally, installation of rock slope protection would result in permanent impacts to 0.06 ac of riverine habitat suitable for migration and/or rearing. Because the proposed project would result in temporary and permanent impacts to steelhead habitat, prior to construction, informal consultation with the NMFS under Section 7 of the Federal Endangered Species Act would be required. **Mitigation Measures BIO-1 through BIO-7 and BIO-9** require preconstruction surveys, construction employee training, ESA fencing, monitoring, removal of invasive species, and revegetation. **Mitigation Measures BIO-11 through BIO-19** require seasonal and daily work restrictions within the Carmel River, limitations on materials allowed to enter the water channel, relocation of steelhead, monitoring of water diversion and dewatering, limitations on vegetation removal and hydroseeding, and restoration of the Carmel River upon completion of construction. **Mitigation Measures HAZ-1 and PBO-7** require equipment maintenance and fueling to be conducted in a manner that would not introduce pollutants to aquatic habitats. **Mitigation Measure WQ-1** requires preparation of a SWPPP and implementation of construction BMPs. **Mitigation Measure PBO-12** requires screening of dewatering pumps Implementation of **Mitigation Measures BIO-1 through BIO-7, BIO-9, BIO-11 through BIO-19, HAZ-1, WQ-1, PBO-7, and PBO-12** would reduce impacts to South/Central California Coast Steelhead DPS and its critical habitat to a less than significant level.

Significance Determination: Potentially Significant Impact.

Mitigation Measures:

Mitigation Measure BIO-1 **Qualified Biologist/Biological Monitor.** Prior to initial ground disturbance, the Construction Contractor shall hire a qualified biologist with experience in steelhead biology and ecology, aquatic habitats, biological monitoring (including diversion/dewatering), and capture, handling, and relocating fish species. The qualified biologist shall be present at the

work site until all ground-disturbing activities in all portions of the project site have been completed, including installation and removal of the diversion structures, and workers have received environmental training. The qualified biologist shall be present at the work site daily until ground-disturbing activities in the BSA have been completed including installation and removal of the diversion structures. Once the dewatering and diversion structures have been installed, the qualified biologist shall make periodic inspections of the project site (weekly). A final inspection of the site shall also be made by the qualified biologist after completion of construction. After completion of ground-disturbing activities, the Construction Contractor shall designate a qualified monitor who shall ensure on-site compliance with all avoidance and minimization efforts when the qualified biologist is not on site. The qualified biologist shall ensure that the qualified monitor is familiar with the avoidance and minimization efforts and is able to identify all the special-status species of potential occurrence in the biological study area (BSA). The monitor and the qualified biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the United States Fish and Wildlife Services (USFWS), the California Department of Fish and Wildlife (CDFW), or the National Marine Fisheries Service (NMFS) at any point during construction. If work is stopped, either the qualified biologist or on-site monitor shall immediately notify the California Department of Transportation (Caltrans) and the County of Monterey (County). If a federally listed species is found in the work area during construction and a Biological Opinion has not been issued for the project, then the qualified biologist must stop work and immediately notify Caltrans. Caltrans shall then consult with the USFWS or National Marine Fisheries Service (NMFS) and shall then advise the Construction Contractor on how to proceed. Likewise, should a State-listed species be found in the work area for which no incidental take permit has been issued, the County's Project Manager shall then consult with CDFW and shall advise the Construction Contractor on how to proceed.

Mitigation Measure BIO-2 **Environmental Training Session.** Prior to initial ground disturbance, the qualified biologist shall conduct an environmental training session for all construction and maintenance personnel. At a minimum, the training shall include a description of the special-status species that may occur in the biological study area (BSA), their habitat

requirements, the measures being implemented to avoid and minimize impacts to these species, the authority and responsibilities of the qualified biologist and monitor, and procedures to follow if a listed or special-status species is observed. The environmental training shall include a discussion of the boundaries behind which the workers and equipment must remain, the purpose of the Environmentally Sensitive Area (ESA) fencing, and the resources being protected. All attendees shall sign a form acknowledging their attendance at an environmental training and their understanding of the measures being implemented. This form shall be kept by the qualified biologist and provided with the final monitoring report.

Mitigation Measure BIO-3 **Environmentally Sensitive Area Fencing.** Prior to construction activities, the qualified biologist shall identify locations for the placement of brightly colored Environmentally Sensitive Area (ESA) fencing to protect sensitive habitat areas (i.e., Carmel River, jurisdictional areas, wetlands, riparian areas, California red-legged frog habitat, *Alnus rhombifolia* Forest Alliance Association (*Alnus rhombifolia-Salix laevigata*), riverine habitat adjacent to the construction area and to delineate a protection zone beyond which construction activities are prohibited and to prevent terrestrial animals from entering the work area. The Construction Contractor, with the assistance of the qualified biologist, shall install the ESA fencing prior to construction activities. The fence shall be staked and buried at least six (6) inches into the soil. The qualified biologist shall verify the correct placement and installation of the fences before work begins in the area. Fencing shall be maintained in good condition for the duration of construction activities.

Mitigation Measure BIO-4 **Special-Status Species Survey.** Immediately before initial ground disturbance and/or vegetation clearing in the Carmel River high-flow channel, the qualified biologist shall conduct a survey of the work area for special-status species, including California red-legged frog, western pond turtle, two-striped garter snakes, Monterey big-eared woodrat, and South/Central Coast steelhead. If special-status species are found, they shall be allowed to leave the work area on their own or, if approved by the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), and/or National Marine Fisheries Service (NMFS), the special-status species shall be captured and relocated by the biologist to a safe place outside the work area.

Mitigation Measure BIO-5 **Removal of Invasive Wildlife.** During project construction, a qualified biologist shall permanently remove individuals of nonnative, invasive wildlife species (e.g., bullfrogs, crayfish, and centrarchid fish) from the project area and dispatch them humanely, in compliance with the California Fish and Game Code, if they are found during surveys or monitoring activities. Nonnative fish and wildlife shall not be returned to the river.

Mitigation Measure BIO-6 **River Monitoring.** During vegetation removal, initial grading, and other ground-disturbing activities in the Carmel River channel, a qualified biologist shall monitor such activities for reptiles and other small wildlife exposed by such activities and then relocate them in a safe place outside the exclusion fence.

Mitigation Measure BIO-7: **Routes and Boundaries.** Prior to the start of construction, the County of Monterey shall ensure that the number and size of access routes and staging areas and the total area of construction activity is limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated both on plans and in the field prior to the start of construction activities. Staging areas, access routes, and construction areas shall be located outside of wetland and riparian areas to the maximum extent practicable. Work in the Alnus rhombifolia Forest Alliance (Alnus rhombifolia-Salix laevigata Association) and the live channel of the Carmel River shall be minimized to the greatest extent possible. The work areas on the underside of the Robinson Canyon Bridge shall be accessed from the area northwest of the bridge.

Mitigation Measure BIO-8: **Revegetation.** Prior to completion of construction, the Construction Contractor shall ensure that all temporary impact areas and permanently graded areas are revegetated with the native seed mix listed in the table below. This seed mix may be altered as necessary if some of the seeds are unavailable at the time of revegetation or too expensive provided that the additions or substitutions are native species of local stock that provide similar erosion control properties as the replaced species.

Scientific Name	Common Name	Rate (Lbs./Acre)	Minimum Percent Germination
Artemisia douglasiana	Mugwort	2.0	50
Bromus carinatus carinatus	California brome	5.0	85
Elymus trachycaulus	Slender wheatgrass	2.0	60
Elymus X triticum	Regreen	10.0	80
Eschscholzia californica	California poppy	2.0	70
Hordeum brachyantherum	California barley	2.0	80
Lupinus bicolor	Bicolored lupine	4.0	80

Mitigation Measure BIO-9: **Revegetation of Rock Slope Protection.** During placement of rock slope protection (RSP), the Construction Contractor shall ensure that native topsoil from the channel is incorporated within the RSP to provide a seeding and planting medium. Areas of RSP above the ordinary high water mark (OHWM) shall be revegetated with the seed mix listed in the table in Mitigation Measure BIO-8. This seed mix may be altered as necessary if some of the seeds are unavailable at the time of revegetation or too expensive provided that the additions or substitutions are native species of local stock that provide similar erosion control properties as the replaced species. In addition, locally obtained willow cuttings/poles shall be installed at a 3:1 ratio (trees planted: trees removed) within the lower sections of the RSP near the OHWM.

Mitigation Measure BIO-10: **Monterey Big-Eared Woodrat.** Prior to vegetation removal, a qualified biologist shall survey the work area to be cleared for Monterey big-eared woodrat nests. If woodrat nests are located within the work area, they shall be disassembled by hand or with hand tools to allow any woodrats in the nest to move out of the work area. The nest material shall then be moved out of the work area and stacked where it is accessible to the woodrats.

Mitigation Measure BIO-11: **Construction Period in the Carmel River.** The County of Monterey (County) shall ensure that all in-water work within the Carmel River is restricted to the low-flow season between July 1 and October 15, which is within the seasonal work window recommended by the National Marine Fisheries Service (NMFS) to minimize effects to steelhead.

Mitigation Measure BIO-12: **Concrete and Toxic Substance Use.** The Construction Contractor shall ensure that no fill material, including asphalt or concrete is allowed to enter the active water channel, with exception of clean river rock for the water diversion. Concrete shall not be allowed contact with surface waters until it has fully cured. In the event that uncured concrete contacts surface water, the pH of water in the Carmel River downstream of the work area shall be monitored before and after pouring of concrete until it cures. Water that contacts wet concrete and has a pH greater than 9.0 shall be pumped out of the work area and disposed of outside the Carmel River channel. No substances toxic to aquatic life shall be discharged into the Carmel River (e.g., diesel fuel, oil, hydraulic fluid, run-off from curing concrete, etc.). Good Housekeeping BMPs shall be used to keep toxic substances and fill materials out of aquatic habitats.

Mitigation Measure BIO-13: **Steelhead Relocation.** The qualified biologist shall coordinate with California Department of Transportation (Caltrans), as well as the County of Monterey (County), to identify a suitable upstream or downstream location within the Carmel River where steelhead captured within the biological study area (BSA) shall be relocated. After completion of the proposed project, the qualified biologist shall prepare a report providing the results of the removal/relocation effort for submittal to the National Marine Fisheries Service (NMFS). The report shall also include information on non-native species that were removed from the BSA.

Mitigation Measure BIO-14: **Water Diversion.** The qualified biologist shall be on the project site during dewatering and river diversions. The qualified biologist shall assist the Construction Contractor in the implementation of the dewatering and river diversions, to monitor the placement and removal of dewatering and diversion devices, and to capture and relocate stranded steelhead. During construction, the qualified biologist shall ensure that water diversions allow unrestricted passage of adult and juvenile steelhead through the Biological Study Area (BSA). Pumped water shall be released into a portable storage tank to allow suspended sediment to settle prior to being released back into the Carmel River.

Mitigation Measure BIO-15: **Construction Timing.** The Construction Contractor shall ensure that all construction within the Carmel River is conducted during daylight hours to allow for an extended period of inactivity (i.e., night time) for salmonids, if

present, to pass through the Biological Study Area (BSA) undisturbed.

Mitigation Measure BIO-16: **Vegetation Removal.** Where vegetation removal is necessary, the Construction Contractor shall ensure that rapidly sprouting plants, such as willows, are cut off at the ground line and the root systems left intact.

Mitigation Measure BIO-17: **Hydroseeding.** If hydroseed mixes are used to stabilize disturbed areas, the Construction Contractor shall ensure that such mixes do not contain fertilizers.

Mitigation Measure BIO-18: **Contour Restoration.** Prior to the completion of construction, the Construction Contractor shall ensure that the Carmel River channel, upland areas, and *Alnus rhombifolia* Forest Alliance Association (*Alnus rhombifolia-Salix laevigata*) are returned to their original contours and condition to the greatest extent possible. In addition, alteration of the Carmel River bed shall be minimized to the maximum extent possible.

Mitigation Measure BIO-19: **Removal of Diversions and Barriers.** Prior to the completion of construction, the Construction Contractor shall ensure that diversions and barriers to flow are removed in a manner that allows flow to resume with the least disturbance to the substrate. Imported material not part of the permanent scour repair shall be removed from the stream bed upon completion of construction. All constructed temporary access roads into the Carmel River channel, construction mats, and other temporary material used for construction shall be removed from the Biological Study Area (BSA) and transported to an appropriate disposal or storage facility.

In addition to the Mitigation Measures listed above, the following measures will be implemented to reduce adverse effects to California red-legged frog and their habitat. These measures are from the *Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program* (8-8-10-F-58) (PBO). USFWS has concurred that the proposed project will be included in PPO.

Mitigation Measure PBO-1: Only USFWS-approved biologists will participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

Mitigation Measure PBO-2: Ground disturbance will not begin until written approval is received from the USFWS that the biologist is qualified to conduct the work,

unless the individual(s) has/have been approved previously and the USFWS has not revoked that approval.

Mitigation Measure PBO-3: A USFWS-approved biologist will survey the project site no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the work site before work begins. The USFWS-approved biologist will relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with the proposed project. The relocation site should be in the same drainage to the extent practicable. Caltrans will coordinate with the USFWS on the relocation site prior to the capture of any California red-legged frogs.

Mitigation Measure PBO-4: Before any activities begin on a project, a USFWS-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

Mitigation Measure PBO-5: A USFWS-approved biologist will be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed. After this time, the County will designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist will ensure that this monitor receives the training outlined in **PBO-4** and in the identification of California red-legged frog. If the monitor or the USFWS-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by Caltrans and the USFWS during review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the adverse effect immediately or require that all actions which are causing these effects be halted. If work is stopped, the USFWS will be notified as soon as possible.

Mitigation Measure PBO-6: During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

Mitigation Measure PBO-7: All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and in a location from where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, Caltrans will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

Mitigation Measure PBO-8: Habitat contours will be returned to their original configuration at the end of project activities. This measure will be implemented in all areas disturbed by activities associated with the project, unless the USFWS and Caltrans determine that it is not feasible or modification of original contours would benefit the California red-legged frog.

Mitigation Measure PBO-9: The number of access routes, size of staging areas, and the total area of activity will be limited to the minimum necessary to achieve the project goals. Environmentally Sensitive Areas will be delineated to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

Mitigation Measure PBO-10: The County will attempt to schedule work activities for times of the year when impacts to California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and informal consultation between Caltrans and the USFWS during project planning should be used to assist in scheduling work activities to avoid sensitive habitats during key times of the year.

Mitigation Measure PBO-11: To control sedimentation during and after project implementation, the County will implement Best Management Practices (BMPs) outlined in any authorizations or permits, issued under the authorities of the Clean Water Act that it receives for the specific project. If BMPs are ineffective, the County will attempt to remedy the situation immediately, in consultation with the USFWS.

Mitigation Measure PBO-12: If a work site is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inches to prevent California red-legged frogs from entering the pump system.

Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. The methods and materials used in any dewatering will be determined by the County in consultation with the USFWS on a site-specific basis. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the stream bed will be minimized to the maximum extent possible; any imported material will be removed from the stream bed upon completion of the project.

Mitigation Measure PBO-13: Unless approved by the United States Fish and Wildlife Service (USFWS), water will not be impounded in a manner that may attract California red-legged frog.

Mitigation Measure PBO-14: A United States Fish and Wildlife Service (USFWS)-approved biologist will permanently remove any individuals of exotic species such as bullfrogs, crayfish, and centrarchid fishes from the project area, to the maximum extent possible. The USFWS-approved biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

Mitigation Measure PBO-15: If Caltrans demonstrates that disturbed areas have been restored to conditions that allow them to function as habitat for the California red-legged frog, these areas will not be included in the amount of total habitat permanently disturbed.

Mitigation Measure PBO-16: To ensure that diseases are not conveyed between work sites by the USFWS-approved biologists, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

Mitigation Measure PBO-17: Project sites will be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials will be used to the extent practicable. Invasive exotic plants will be controlled to the maximum extent practicable. This measure will be implemented in all areas disturbed by activities associated with the project, unless the USFWS and Caltrans determine that it is not feasible or practical.

Mitigation Measure PBO-18: Caltrans or the County as its designee will not use herbicides as the primary method used to control invasive, exotic plants. However, if Caltrans or the County determines the use of herbicides is the only feasible method for controlling invasive plants at a specific project site, they will implement the following additional protective measures for the California red-legged frog:

a. Caltrans or the County will not use herbicides during the breeding season for the California red-legged frog.

b. Caltrans or qualified biologists contracted by the County will conduct surveys for the California red-legged frog immediately prior to the start of any herbicide use. If found, California red-legged frogs will be relocated to suitable habitat far enough from the project area that no direct contact with herbicides would occur.

c. Giant reed and other invasive plants will be cut and hauled out by hand and then painted with glyphosate or glyphosate-based products, such as Aquamaster® or Rodeo®.

d. Licensed and experienced Caltrans or County staff or a licensed and experienced contractor will use a hand-held sprayer for foliar application of Aquamaster® or Rodeo® where large monoculture stands occur at an individual project site.

e. All precautions will be taken to ensure that no herbicide is applied to native vegetation.

f. Herbicides will not be applied on or near open water surfaces (no closer than 60 feet from open water).

g. Foliar applications of herbicide will not occur when wind speeds are in excess of three (3) miles per hour.

h. No herbicides will be applied within 24 hours of forecasted rain.

i. Application of all herbicides will be done by a qualified Caltrans or County staff or contractors to ensure that overspray is minimized, that all application is made in accordance with label recommendations, and with implementation of all required and reasonable safety measures. A safe dye will be added to the mixture to visually denote treated sites. Application of herbicides will be consistent with the U.S. Environmental Protection Agency's Office of Pesticide Programs, Endangered Species Protection Program county bulletins.

j. All herbicides, fuels, lubricants, and equipment will be stored, poured, or refilled at least 60 feet from riparian habitat or water bodies in a location where a spill would not drain directly toward aquatic habitat. Caltrans will ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, Caltrans or the County will ensure that a plan is in place for a prompt and effective response to accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

Mitigation Measure PBO-19: Upon completion of the project, the County will provide Caltrans with a Project Completion Report and Caltrans will ensure this report is provided to the Ventura Fish and Wildlife Office. Caltrans should include recommended modifications of the protective measures if alternative measures would facilitate compliance with the provisions of this consultation.

Significance Determination After Mitigation: Less than Significant.

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?

California Department of Fish and Wildlife Jurisdiction

The California Department of Fish and Wildlife (CDFW) jurisdiction typically extends beyond the streambed/banks to the limits of riparian vegetation associated with streams, rivers, or lakes. The CDFW defines riparian habitat as "on, pertaining to, the banks of a stream…vegetation which occurs in and/or adjacent to a watercourse." The BSA includes approximately 2.52 ac of CDFW jurisdiction.

Project construction would result in approximately 0.33 ac of temporary impacts and approximately 0.15 ac of permanent impacts to CDFW jurisdictional areas from removal of vegetation. Implementation of the proposed project would also result in approximately 0.17 ac of temporary impacts and approximately 0.07 ac of permanent impacts to riparian habitat (*Alnus rhombifolia* Forest Alliance) from temporary access and staging and installation of rock slope protection. Implementation of **Mitigation Measures BIO-3, BIO-7, BIO-8, BIO-11, BIO-18, BIO-20, PBO-7, PBO-8, HAZ-1, and WQ-1** would require installation of ESA fencing, restrictions on staging and access route placement, revegetation, restricting the timing of work within the streambed, restoration of habitat contours, permits from the regulatory agencies, spill prevention measures, and construction BMPs. With implementation of **Mitigation Measures BIO-3, BIO-7, BIO-8, BIO-11, BIO-18, BIO-20, PBO-7, PBO-8, HAZ-1, and WQ-1** impacts to CDFW jurisdiction would be reduced to a less than significant level.

Sensitive Natural Communities

There are two (2) sensitive natural communities within the BSA - *Alnus rhombifolia* forest alliance and riverine habitat associated with Carmel River. The *Alnus rhombifolia* forest alliance consists of the riparian corridor located on both sides of the Carmel River within the BSA. Riverine habitat is generally characterized as unvegetated open water, defined by bed and bank, conveying perennial flows. There is approximately 1.83 ac of *Alnus rhombifolia* forest alliance and approximately 0.69 ac of riverine habitat within the BSA.

Construction of the proposed project including construction access and staging areas would result in temporary impacts to approximately 0.17 ac of *Alnus rhombifolia* forest alliance and approximately 0.16 ac of riverine habitat. Installation of rock slope protection around Abutment 1 and Piers 2 and 3 would result permanent impacts to approximately 0.07 ac of *Alnus rhombifolia* forest alliance and approximately 0.06 ac of riverine habitat. Implementation of **Mitigation Measures BIO-3, BIO-7 through BIO-9, and BIO-18** would require ESA fencing, minimization of work in sensitive natural communities, revegetation, and habitat contour restoration. In addition, as specified in **Mitigation Measure BIO-21**, permanent impacts to *Alnus rhombifolia* forest alliance would require mitigation by either 1) preserving, creating or restoring impacted resources at a minimum ratio of 3:1 within the

project area and/or nearby areas within the same watershed, or 2) purchasing credits from an approved mitigation bank at a minimum 1:1 mitigation ratio as specified. With implementation of **Mitigation Measure BIO-3, BIO-7 through BIO-9, BIO-18, and BIO-21**, impacts to sensitive natural communities would be reduced to a less than significant level.

Invasive Plant Species

Thirty-two (32) alien/nonnative plants on the California Invasive Plant Council's (Cal IPC) Invasive Plant Inventory were identified as occurring in the BSA. Such species typically occur in areas that have been previously disturbed, such as along roadsides or in places that have periodic natural disturbances including areas subject to floods along the Carmel River. Within the BSA, the disturbed areas adjacent to the river are not intensively managed for weeds and therefore invasive species are present. Ground disturbance associated with project construction can create optimal conditions for the spread of invasive plants by removing and/or disturbing native vegetation and soil. Construction equipment contaminated with soil containing invasive plant seeds from other areas can result in the spread of invasive plant species. In addition to invasive plants, construction activities could facilitate the movement or spread of invasive fish and wildlife species such as nonnative bullfrogs, crayfish, nonnative turtles (i.e., red-eared sliders), and centrarchid fishes. These species are undesirable in natural habitats and may compete with native species for resources including food, refuges, basking sites, and nest sites. In addition to being competitors with native species, nonnative species are often predators of native species. Through competition and predation, nonnative fish and wildlife may have a serious impact on native species and habitats. **Mitigation Measures BIO-8, BIO-9, and BIO-22** requires revegetation with approved native species and implementation of an invasive species abatement and eradication program during construction to ensure that invasive plant species are not introduced or spread. With implementation of **Mitigation Measures BIO-8, BIO-9, and BIO-22**, impacts related to the spread invasive plant species would be reduced to a less than significant level.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:**

Mitigation Measure BIO-20 **Regulatory Permits.** Prior to authorization to proceed with project construction, the County of Monterey shall obtain a 404 Nationwide Permit from the United States Army Corps of Engineers (Corps), a 401 Water Quality Certification from the Central Coast Regional Water Quality Control Board (RWQCB), and Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW), or alternate permits as determined by the issuing agencies.

Mitigation Measure BIO-21 **Compensatory Mitigation For *Alnus rhombifolia* Forest Alliance.** Prior to project completion, the County shall ensure that permanently impacted *Alnus rhombifolia* forest

alliance is mitigated using one (1) of the following methods or a combination of methods:

1) Preservation, creation, or restoration of permanently impacted *Alnus rhombifolia* forest alliance at a minimum ratio of 3:1. This work shall occur within the project area and/or nearby areas within the same watershed; and/or

2) Purchasing credits from an approved mitigation bank at a minimum ratio of 1:1 for permanently impacted *Alnus rhombifolia* forest alliance.

Mitigation Measure BIO-22: **Invasive Species Abatement and Eradication Program.** The County of Monterey shall require the Construction Contractor to implement an invasive species abatement and eradication program during construction. The invasive species abatement and eradication measures shall be included in the project design and contract specifications. At a minimum, the abatement and eradication measures shall include:

- The construction contractor shall inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another.
- Soil and vegetation disturbance shall be minimized to the greatest extent feasible.
- The construction contractor shall ensure that all active portions of the construction site and stockpiled material are sufficiently watered or covered to prevent excessive amounts of dust and seed dispersal.
- Soil/gravel/rock shall be obtained from weed-free sources.
- All invasive plant material removed from during construction shall be disposed of properly in a landfill or other suitable facility where it can be chipped and composted to prevent spreading viable seeds or propagules that could take root on another site.
- Only certified weed-free straw, mulch, and/or fiber rolls shall be used for erosion control.
- Eradication procedures (e.g., spraying and/or hand weeding) shall be implemented should an infestation occur.

- The use of herbicides shall be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the County of Monterey and the Caltrans District Biologist.
- A qualified biologist will permanently remove individuals of nonnative, invasive wildlife species from the project area and dispatch them humanely.
- Nonnative fish and wildlife will not be returned to the river or any other natural waterbody.

Significance Determination After Mitigation: Less than Significant Impact.

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

The BSA includes approximately 0.23 ac of wetlands and 1.10 ac of open water and nonwetland Waters of the U.S. within the jurisdiction of the U.S. Army Corps of Engineers. Construction of the proposed project, including construction access and dewatering, would result in temporary impacts to approximately 0.07 ac of wetland waters and 0.16 ac of non-wetland waters of the U.S. Installation of rock slope protection would result in permanent impacts to approximately 0.09 ac of non-wetlands waters of the U.S. Implementation of **Mitigation Measures BIO-3, BIO-7, BIO-8, BIO-11, BIO-18, BIO-20, PBO-7, PBO-8, HAZ-1, and WQ-1** would require installation of ESA fencing, restrictions on staging and access route placement, revegetation, restricting the timing of work within the streambed, restoration of habitat contours, permits from the regulatory agencies, spill prevention measures, and construction BMPs. With implementation of **Mitigation Measures BIO-3, BIO-7, BIO-8, BIO-11, BIO-18, BIO-20, PBO-7, PBO-8, HAZ-1, and WQ-1,** impacts to wetlands and non-wetland waters of the U.S. protected under Section 404 of the Clean Water Act would be reduced to a less than significant level.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:** Refer to **Mitigation Measures BIO-3, BIO-7, BIO-8, BIO-11, BIO-18, BIO-20, PBO-7, PBO-8, HAZ-1**, and **WQ-1**.

Significance Determination After Mitigation: Less than Significant Impact.

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?

Within the BSA the Carmel River as well as associated riparian habitat provides a corridor for migratory wildlife. Many species of terrestrial animals likely use this riparian corridor

and high flow channel for local and long distance movements. Construction of the proposed project would result in temporary effects to wildlife movement, but these effects would be temporary in that they would only occur during construction and would not result in a permanent barrier to aquatic or terrestrial animals.

The Carmel River is a significant migration route for South/Central California Coast Steelhead DPS. Although a portion of the Carmel River within the BSA would be dewatered during construction to accommodate the scour repair at the bridge pilings, water diversions features would be designed to allow for unrestricted passage of adult and juvenile steelhead. Furthermore, a qualified fisheries biologist and CDFW approved biologist would be on-site to assist in the to design and implementation of diversion features in the river, restrict work within the streambed when surface water within the Carmel River is at its seasonal minimum (July 1 through October 15), and require that all construction activity be conducted during daylight hours to allow salmonids, if present, to migrate undisturbed through the BSA. **Mitigation Measures BIO-11 through BIO-19** require seasonal and daily work restrictions within the Carmel River, limitations on materials allowed to enter the water channel, relocation of steelhead, monitoring of water diversion and dewatering, limitations on vegetation removal and hydroseeding, and restoration of the Carmel River upon completion of construction. **Mitigation Measure PBO-12** requires screening of dewatering pumps. Implementation of **Mitigation Measures BIO-11 through BIO-19, and PBO-12** would reduce impacts to migrating South/Central California Coast Steelhead to a less than significant level.

Thirty-eight (38) species of birds were observed in the BSA during the field surveys. Some of these birds have the potential to nest in the BSA. The riparian vegetation in the BSA provides nesting habitat for the greatest number of species, but some species could nest in open areas along road shoulders and on the bridge. Removal of vegetation and construction activities could directly destroy an active nest or affect the behavior of adults and young birds in the nest and cause a nest to fail. Additionally, construction activity could attract predatory species to the work area, thus increasing the risk of nest predation to nests located within or adjacent to the work area. **Mitigation Measure BIO-23** restricts vegetation removal to the non-nesting season for birds (September 1 through January 31) and if the non-nesting season cannot be avoided, **Mitigation Measure BIO-24** requires preconstruction nesting bird surveys. As required by **Mitigation Measure BIO-25**, if an active nest is discovered, the area will be delineated using ESA fencing to prohibit construction in the vicinity of the nest. With implementation of **Mitigation Measures BIO-23 through BIO-25** potential construction-related impacts to nesting birds would be reduced to a less than significant level.

The proposed project consists of installation of scour protection measures. The proposed project does not involve a change in existing land uses or human activities as compared to existing conditions. Therefore, the proposed project would not result in permanent impacts to native birds protected under the MBTA.

Significance Determination: Potentially Significant Impact.

Mitigation and/or Compliance Measures:

Mitigation Measure BIO-23 **Vegetation Removal.** To the greatest extent feasible, the Construction Contractor shall ensure that vegetation removal and trimming for the access road and construction areas are conducted during the non-nesting season for birds (i.e., between September 1 and January 31).

Mitigation Measure BIO-24 **Nesting Bird Surveys.** If project construction takes place during the bird nesting season (February 1 to August 31), all suitable nesting habitat within 50 feet of the limits of work shall be surveyed by a qualified biologist no more than 14 days prior to ground disturbing/vegetation removal activities and again within two (2) days (48 hours) of such activities. Areas outside the public right of way shall not be surveyed for active nests unless such areas are visible from the public right of way.

Mitigation Measure BIO-25 **Nesting Bird Buffer Areas.** If an active bird nest is found, a qualified biologist shall delineate an appropriate buffer using plastic construction fencing (Environmentally Sensitive Area [ESA] fencing), pin flags, or other easily identified fencing material. If necessary, the biologist will consult with United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) to determine an appropriate buffer size. Typically, buffers range from 250 to 500 ft depending on the species, nest location, surrounding habitat, and the nature of the adjacent construction activity. During construction, the qualified biologist will conduct regular monitoring (at USFWS- and CDFW-approved intervals) to evaluate the nest for potential disturbances associated with construction activities. Construction within the buffer shall be prohibited until the qualified biologist determines that the nest is no longer active. If an active nest is found after completion of the preconstruction surveys and after construction begins, all construction activities in the nest vicinity shall stop until a qualified biologist has evaluated the nest and erected the appropriate buffer around the nest. If establishment of the buffer is not feasible, USFWS/CDFW shall be contacted for further avoidance and minimization guidelines.

Significance Determination After Mitigation: Less than Significant Impact.

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

Protected trees within Monterey County are regulated by the County of Monterey Zoning Ordinance, Title 21, Chapter 21.64.260 - Preservation of Oak and Other Protected Trees (tree

ordinance). In addition, SB 1334 requires mitigation for projects with significant oak woodland impacts. Implementation of the proposed project would not result in the removal of oak trees. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site does not fall in an area with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, Regional, or State habitat conservation plan, and therefore would not present a conflict with any such plan. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

4.5 CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With 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?	☐	☐	☐	☒
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
(c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
(d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Impact Analysis:

The discussion and analysis provided in this section is based on the *Historic Property Survey Report* (HPSR) (LSA, August 2016) (Appendix C). The project area for cultural resources is the Area of Potential Effects (APE), which is the area where ground-disturbing activities would occur, and extends around the entirety of the parcels where the built environment may be direct or indirectly affected. It has been bounded to include the maximum extent of ground disturbance including access routes, staging, and work areas.

a) **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?** CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Places (California Register); (2) listed in a local register of historical resources as defined in the California Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5(a)).

A records search of the APE was conducted on April 16, 2015 at the Northwest Information Center (NWIC). On February 18 and May 9, 2016 field surveys of the APE were conducted. No cultural resources have been recorded within the APE and none were observed during field surveys. There is one (1) property within the APE which is exempt from evaluation per the criteria in the Section 106 Programmatic Agreement Attachment 4 (Properties Exempt from Evaluation). The property is located at 28000 Robinson Canyon Road.

The Caltrans Historic Bridge Inventory lists the bridge (#44C-017) as Category 5, not eligible for inclusion in the National Register.

Significance Determination: No Impact.

Mitigation/Compliance Measures: No mitigation is required.

Significance Determination After Mitigation: No Impact.

b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?** Based on the results of the background research and archaeological field survey, no archaeological resources were identified within the APE and there is a low indication of sensitivity for the presence of previously undocumented buried archaeological resources. Six (6) previously recorded sites were identified within the one (1) mile records search radius but would not be impacted by the proposed project because they are outside of the APE. The APE consists largely of poorly developed Tujunga Fine Sand which may contain buried land surfaces that were suitable for occupation by Native Americans. The riverbed is frequently flooded and is unlikely to contain intact, National Register-eligible archaeological deposits. While the riverbanks may be sensitive for buried archaeological deposits, the northwest riverbank, where there would be substantial excavation to create an access road, was carefully examined for archaeological deposits and none were observed. The remaining riverbanks would undergo no substantial ground disturbing activities during construction.

In the unlikely event that any previously unidentified archaeological resources are discovered during ground disturbing activities, work in the area would be required to cease and deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2 as specified in **Compliance Measure CULT-1**. Compliance with existing regulations, as specified in **Compliance Measure CULT-1**, would reduce the potential for impacts to unidentified archaeological resources to a less than significant level.

Significance Determination: Less than Significant Impact.

Mitigation and/or Compliance Measures:

Compliance Measure CULT-1: Discovery of Unidentified Archaeological and Paleontological Resources. During construction, if cultural, archaeological, historical, or paleontological resources are encountered (surface or subsurface resources), work shall be halted immediately within 50 meters (165 ft) of the find until a qualified professional archaeologist can evaluate it. The County of Monterey Resource Management Agency (RMA) – Planning and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) or paleontologist shall be immediately contacted by the responsible individual present on site. When contacted, the project planner and the archaeologist or paleontologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15064.5(f)).

Significance Determination After Compliance: Less than Significant Impact.

c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?** No paleontological resources or unique geologic features were observed within the project APE during the archaeological survey. The majority of soils in the APE are poorly developed and frequently flooded and may be sensitive for redeposited paleontological resources, but these soils are unlikely to contain intact paleontological deposits. If any previously unidentified paleontological resources are discovered during ground-disturbing activities, compliance with **Compliance Measure CULT-1** would reduce the potential for impacts to unidentified paleontological resources to a less than significant level.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** Refer to **Compliance Measure CULT-1** under Response 4.5 b), above.

Significance Determination After Compliance: Less than Significant Impact.

d) **Disturb any human remains, including those interred outside of formal cemeteries?** No human remains are present within the APE. Two (2) prehistoric archaeological sites containing human burials have been recorded within the one (1) mile records search radius, approximately 250 and 500 feet from the APE but would not be impacted by the proposed project because they are outside the APE. Ground-disturbing activities associated with the proposed project have the potential to disturb previously unknown human remains. In the unlikely event that human remains are encountered during construction activities, the proper authorities would be notified and standard procedures for the respectful handling of human remains during the earthmoving activities would be implemented, as specified by **Compliance Measure CULT-2**. Compliance with **Compliance Measure CULT-2** would reduce the potential for impacts on unknown buried human remains to a less than significant level.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:**

Compliance Measure CULT-2: Discovery of Human Remains. During construction, consistent with the requirements of California Health and Safety Code (HSC) Section 7050.5, if human remains are discovered on site, no further disturbance shall occur until the Monterey County Coroner can evaluate them. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.9 and 5097.993 of the Public Resources Code, the Native American Heritage Commission shall identify a "Native American Most Likely Descendent" to inspect the site and

provide recommendations for the proper treatment of the remains and any associated grave goods.

Significance Determination After Compliance: Less than Significant Impact.

4.6 GEOLOGY AND SOILS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
	ii) Strong seismic ground shaking?	☐	☒	☐	☐
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
	iv) Landslides?	☐	☐	☐	☒
(b)	Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Impact Analysis:

The discussion and analysis provided in this section is based on the *Draft Geotechnical Engineering Report* (Parikh, April 2016) (refer to Appendix D) and the *Monterey County General Plan (2010)*.

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

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

According to the California Department of Conservation, the proposed project is not within or adjacent to an Alquist–Priolo Earthquake Fault Zone. According to the Monterey County General Plan, no known active regional faults cross through the project area. The nearest active regional fault is the Monterey Bay-Tularcitos Fault (Seaside-Monterey Section), located approximately 0.074 mi from the project area. The Tularcitos and Monterey Bay Sections of this fault are located 0.12 and 1.97 mi from the project area, respectively. The proposed project would not result in impacts related to rupture of known earthquake faults as designated on the most recent Alquist-Priolo Earthquake Fault Zone map or from other know faults in the project area. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

a) ii) **Strong seismic ground shaking?**

The extent of ground shaking associated with an earthquake depends on the size of the earthquake and the geologic material of the underlying area. As discussed above, the nearest active fault is the Monterey Bay-Tularcitos Fault (Seaside-Monterey Section), located approximately 0.074 mi from the proposed project. According to the geotechnical report, the project site is located in a seismically active part of northern California. Many faults in the region are capable of producing earthquakes, which may cause strong ground shaking at the site. It is likely that the project site would be subject to moderate seismic shaking during an earthquake, which may expose the Robinson Canyon Road bridge and people using the bridge to adverse affects. **Mitigation Measure GEO-1** requires the County to prepare a Final Geotechnical Report which would stipulate appropriate seismic design provisions that shall be implemented so that the scour protection measures installed along the bridge substructure would be capable of tolerating seismic-related ground shaking. With implementation of **Mitigation Measure GEO-1**, potential project impacts associated with seismic ground shaking would be reduced to a less than significant level.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:**

Mitigation Measure GEO-1: **Final Geotechnical Report.** During final design, a detailed geotechnical investigation shall be conducted by qualified geotechnical personnel to assess the geotechnical conditions at the project site. The geotechnical investigation shall include seismic cone penetration tests and exploratory borings to investigate site-specific soils and conditions, as well as the collection of subsurface soil samples for laboratory testing. The project-specific findings and recommendations of the geotechnical investigation shall be incorporated into final design of the proposed project and shall be summarized in the Final Geotechnical Report to be submitted to the County of Monterey for review and approval.

Significance Determination After Mitigation: Less than Significant Impact.

a) iii) **Seismic-related ground failure, including liquefaction?**

Liquefaction occurs when shallow, loose, unconsolidated, fine- to medium-grained sediments saturated with water are subjected to shaking as a result of an earthquake. This causes the

soils to lose cohesion and shear strength, leading to liquefaction. The possibility of liquefaction occurring at the project site is dependent upon the occurrence of a significant earthquake in the vicinity; sufficient groundwater to cause high pore pressures; and the grain size, plasticity relative density, and confining pressures of the soils at the project site.

According to the *Draft Geotechnical Engineering Report*, the sand layers encountered at depths of approximately 13 ft to 33 ft at the project site have been identified as potentially liquefiable. The *Draft Geotechnical Engineering Report* indicates that potential post-liquefaction settlement would be about 2 inches. **Mitigation Measure GEO-1** requires the County to prepare a Final Geotechnical Report which stipulates appropriate scour protection measures that shall be implemented to address the high potential for liquefaction at the project site. With implementation of **Mitigation Measure GEO-1**, liquefaction-related impacts would be reduced to a less than significant level.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:** Refer to **Mitigation Measure GEO-1** under Response 4.6 a)(ii), above.

Significance Determination After Mitigation: Less than Significant Impact.

a) iv) **Landslides?**

Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes in areas with significant ground slopes. Aside from the natural slopes associated with the river channel, the project site is relatively flat. According to the State Seismic Hazards Zone map, the project site is not located in an area identified as susceptible to landslides. The potential for seismically induced landslides to occur in the project area would be the same as with the existing condition. There is no potential for the proposed project to expose people or structures to impacts related to landslides. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

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

During construction activities, soil would be exposed during grading and excavation activities, and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate; although construction would occur between June and October, which is outside the rainy season. Nevertheless, any erosion could result in short-term water quality impacts as identified in Section 4.9, Hydrology and Water Quality. As required by the Construction

General Permit and as prescribed in **Compliance Measure WQ-1**, a Storm Water Pollution Prevention Plan would be prepared, which would specify construction BMPs that would be implemented during construction activities. Construction BMPs would include Erosion Control BMPs designed to minimize erosion. In addition, as discussed in **Compliance Measure WQ-2**, the County Municipal Code requires preparation of an Erosion Control Plan that provides methods to control runoff, erosion, and sediment movement during project construction. With the implementation of **Compliance Measures WQ-1 and WQ-2**, potential impacts associated with erosion or topsoil loss would be reduced to a less than significant level.

The proposed project involves installation of scour protection measures along the bridge substructure. Implementation of the proposed project would not result in an increase in impervious surface area at the project site or result in an increase in surface runoff or soil erosion. Operation of the proposed project would not result in impacts associated with soil erosion or the loss of topsoil. No mitigation is required.

Significance Determination: Potentially Significant Impact.

Mitigation and/or Compliance Measures: Refer to **Compliance Measures WQ-1 and WQ-2** under Section 4.9, Hydrology and Water Quality

Significance Determination After Compliance: Less than Significant Impact.

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?**

As indicated in Response 4.6 a)(iv) above, the project area is relatively flat aside from the natural slopes associated with the river channel. According to the State Seismic Hazards Zone Map, the project area is not located in an area identified as susceptible to landslides. There is no potential for seismically induced landslides to occur on the project site. No mitigation is required.

Ground subsidence can occur as a result of "shakedown" when dry, low cohesion soils are subjected to earthquake vibration of high amplitude. In general, significant deposits of dry, loose sandy soils do not exist in the project area as most of the soil is partially or completed saturated. The potential for ground subsidence to occur in the project area is less than significant. No mitigation is required.

As previously discussed, sand layers encountered at the project site at depths of 13 ft to 38 ft bgs have been identified as potentially liquefiable. Ground subsidence can occur when dry, low cohesion soils are subject to high amplitude earthquake vibrations. Liquefaction-induced lateral spreading is defined as finite, lateral displacement of gently sloping or flat-laying ground as a result of pore-pressure build-up or liquefaction in a shallow underlying deposit toward a free face such as an excavation, channel, or open body of water. Lateral spreading is generally caused by liquefaction of soils with gentle slopes. The project site consists

predominately of sandy soils and there is a potential for liquefaction at the project site. However, the proposed project is a scour repair project only; the project is not adding any new structures or additional load. Potential impacts associated with liquefaction-induced lateral spreading would be the same as in the existing condition. Potential impacts associated with liquefaction-induced lateral spreading would be less than significant and no mitigation is required.

Collapsible soils consist of loose, dry, low-density materials that collapse and compact under the addition of water or excessive loading. Soils prone to collapse generally have a substantial amount of clay and fail (collapse) when subjected to saturation or loading. The soils in the project area are mostly loose to medium dense sands with gravel, cobbles, silt, pebbles, and organic matter. These soils are not considered collapsible. Further, they are already under saturated conditions and the project is neither adding new structures nor additional load. The potential for impacts associated with collapsible soils would be the same as in the existing condition. Potential impacts associated with collapsible soils would be less than significant and no mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

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?**

Expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell). The change in the soil volume can cause structures to move unevenly and crack. The extent or range of the shrink/swell is influenced by the amount and kind of clay present in the soil. Expansive soils can be widely dispersed, and they can occur in hillside areas as well as low-lying alluvial basins.

The soils in the project area are mostly loose to medium dense sands with gravel, cobbles, silt, pebbles, and organic matter. These soils are not considered expansive. The potential for impacts associated with expansive soils would be the same as with the existing condition. Potential impacts associated with expansive soils would be less than significant and no mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

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

The proposed project is a scour repair project and would not generate wastewater. No septic or alternative waste treatment systems would be required for construction or operation of the proposed project. The proposed project would not result in impacts associated with soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

4.7 GREENHOUSE GAS EMISSIONS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
(b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Impact Analysis:

a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?**

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur Hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere

("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

The State CEQA Guidelines indicate that a project would normally have a significant adverse GHG emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Emissions estimates for the proposed project are discussed below. GHG emissions estimates are provided herein for informational purposes only because there is no established quantified GHG emissions threshold. The MBARD has proposed a GHG threshold to provide guidance to lead agencies for evaluating GHG impacts in accordance with the requirements of CEQA. Under the guidance for consideration by the MBARD, the GHG threshold applicable to this proposed project would be the bright line threshold of 2,000 MT CO_2e per year.

Short-Term (Construction) GHG Emissions. Construction activities, such as site preparation, site grading, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Project construction emissions were analyzed using the RoadMod, Version 8.1.0 (refer to Appendix A). Results of the analysis indicate that construction would result in approximately 845 metric tons (MT) of CO_2 equivalents (CO_2e) over the 12-month construction period. The MBARD does not provide guidance for analyzing GHG emissions during construction; amortizing the project emissions over 50 years (the expected lifespan of the proposed project) would result in GHG emissions of approximately 16.9 MT CO_2e per year, which is well below the MBARD threshold of 2,000 MT CO_2e per year. Construction of the proposed project would not generate greenhouse gas emissions that would have a significant impact on the environment and construction-related impacts would be less than significant. No mitigation is required.

Long-Term (Operational) GHG Emissions. The proposed project would install scour retrofits at the substructure of the bridge in order to reduce the potential for scour damage to the existing bridge and would not change or increase existing uses within the project area. The proposed project would not increase the existing vehicle use within the project area and would not result in an increase in the generation of GHG emissions from existing conditions. Operation of the proposed project would not generate greenhouse gas emissions that would

have a significant impact on the environment and operational impacts would be less than significant. No mitigation is required.

Significance Determination: Less Than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination after Mitigation: Less Than Significant Impact.

b) **Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?**

The County has not adopted a Climate Action Plan (Plan) and no other local plans exist for the purpose of reducing GHG emissions. The State has established GHG reduction goals under Assembly Bill (AB) 32, Senate Bill (SB) 32, and Executive Order (EO) S-3-05. As discussed in Response 4.7 a), the proposed project's short-term construction and long-term operational GHG emissions would be minimal and would not exceed the established threshold. The MBARD's goal in developing the GHG threshold is to establish an emission level necessary to achieve Statewide goals to reduce GHG emissions. Since the proposed project would not exceed construction emissions levels of 2,000 MT CO_2e per year established by the MBARD, the proposed project would not result in emissions that would conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions and no impacts would occur. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination after Mitigation: No Impact.

4.8 HAZARDS AND HAZARDOUS MATERIALS *Would the project:*		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☒	☐	☐
(b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
(f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
(g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
(h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Impact Analysis:

The analysis provided in this section is based on the *EDR Radius Map Report with GeoCheck* (EDR, January 2017) provided in Appendix E.

a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Hazardous materials are chemicals that could potentially cause harm during an accidental release and are defined as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer. Hazardous substances include all chemicals regulated under the United States Department of Transportation "hazardous materials" regulations and the Environmental Protection Agency (EPA) "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The severity of any such exposure is dependent upon the type, amount and characteristics of the hazardous material involved; the time, location, and nature of the event; and the sensitivity of the individual or environment affected.

Potentially hazardous materials such as dry construction materials, fuels, lubricants, and solvents may be used during work on the bridge substructure. The amount of hazardous chemicals present during construction would be used in compliance with existing government regulations. The potential for the release of hazardous materials during project construction is low and, even if a release were to occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials being used during project construction. As specified in Mitigation Measure HAZ-1, the construction contractor shall be required to prepare and implement an emergency spill and response plan in the event a spill were to occur. In addition, in order to prevent hazardous runoff into the Carmel River in the event of a fuel or oil spill, all equipment maintenance and refueling would be conducted outside of the Carmel River channel. **Mitigation Measure HAZ-2** would require the contractor to adhere to procedures for construction equipment maintenance, refueling, and washing activities. With implementation of **Mitigation Measures HAZ-1 and HAZ-2**, potential impacts associated with the routine transport, use, or disposal of hazardous materials would be reduced to a less than significant level.

The proposed project would modify the substructure of an existing transportation facility. Potentially hazardous materials such as fuels and solvents may be used during routine maintenance activities during operation of the proposed project. However, maintenance activities would be similar to those currently being conducted for the existing bridge and would be conducted in compliance with existing government regulations. Operation of the proposed project would not produce hazardous emissions or require handling, transport or disposal of acutely hazardous materials, substances, or waste. Operation of the proposed project would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials. No mitigation is required.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:**

Mitigation Measure HAZ-1: **Emergency Response and Cleanup Plan.** Prior to commencement of construction activities, the construction contractor shall prepare an emergency response and cleanup plan. The construction contractor shall implement the plan during construction. The plan shall detail the methods to contain and clean up spill of petroleum products or other hazardous materials in the work area.

Mitigation Measure HAZ-2: **Construction Equipment Maintenance, Refueling, and Washing Activities.** During construction, the Construction Contractor shall ensure that all equipment maintenance and fueling areas shall be located at least 60 feet away from aquatic habitats , including the Carmel River channel, on level ground, and away from concentrated flows of storm water and drainage courses. Fueling of vehicles shall take place within a containment area that will prevent any spilled or leaked fuel from running into the river. All equipment

servicing must occur within designated staging areas outside the high-flow river channel. Drip pans or absorbent pads shall be used during equipment refueling and maintenance activities. All motorized equipment used during construction or demolition activities shall be checked for oil, fuel, and coolant leaks prior to initiating work in the high-flow river channel. Any equipment found to be leaking fluids shall not be used on the project and shall be replaced with equipment that does not leak. In the event that a spill does occur, adequate quantities of absorbent spill clean-up material and spill kits shall be kept in the refueling and maintenance area and on fuel trucks. Spill clean-up and materials shall be disposed of immediately after use.

Significance Determination After Mitigation: Less than Significant Impact.

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?**

Exposure to hazardous materials during the construction and operation phases of the proposed project could result from (1) the improper handling or use of hazardous substances; (2) a transportation accident; or (3) inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake).

As stated above, routine transport, use, or disposal of hazardous materials during construction would be used in compliance with applicable laws and regulations. Potentially hazardous materials such as dry construction materials, fuels, lubricants, and solvents may be used during work on the bridge substructure. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations. The potential for the release of hazardous materials during project construction is low and, even if a release were to occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials that would be used during construction activities. In addition, construction equipment maintenance, refueling, and washing activities would not be permitted within the Carmel River channel to prevent hazardous runoff in the event of a fuel or oil spill. **Mitigation Measure HAZ-1** would require the contractor to implement an Emergency Spill and Response Cleanup Plan and **Mitigation Measure HAZ-2** would require the contractor to adhere to procedures for construction equipment maintenance, refueling, and washing activities. Implementation of **Mitigation Measure HAZ-1** and **Mitigation Measure HAZ-2** would reduce potential construction-related impacts associated with hazards from a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment to a less than significant level.

The proposed project involves installation of scour protection and will not change the existing use of the project site. As a scour repair project, the potential for releasing hazardous

materials into the environment during project operation would be limited to vehicles that are traveling on the roadway. This potential exists under existing conditions and would not be exacerbated by the implementation of the proposed project because traffic volumes would remain the same. Additionally, the transport of hazardous materials is subject to strict regulations established by State and federal agencies. Operation of the proposed project would not result in a significant impact associated with hazards from a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. No mitigation is required.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:** Refer to **Mitigation Measure HAZ-1 and HAZ-2** under Response 4.8 a), above.

Significance Determination After Mitigation: Less than Significant.

c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

St. Dunstan's Episcopal School, located at 28003 Robinson Canyon Road, is within 0.25 mi of the proposed project. As stated above, routine transport, use, or disposal of hazardous materials during construction would be used in compliance with applicable laws and regulations. Potentially hazardous materials such as dry construction materials, fuels, lubricants, and solvents may be used during work on the bridge substructure. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations. The potential for the release of hazardous materials during project construction is low and, even if a release were to occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials that would be used during construction activities. Construction of the proposed project would result in a less than significant impact associated with emitting or handling of hazardous emissions or materials, substances or waste within one-quarter mile of an existing or proposed school. No mitigation is required.

The proposed project involves installation of scour protection and will not change the existing use of the project site. As a scour repair project, the potential for releasing hazardous materials into the environment during project operation would be limited to vehicles that are traveling on the roadway. This potential exists under existing conditions and would not be exacerbated by the implementation of the proposed project because traffic volumes would remain the same. Additionally, the transport of hazardous materials is subject to strict regulations established by State and federal agencies. Operation of the proposed project would result in a less than significant impact associated with emitting or handling of hazardous emissions or materials, substances or waste within one-quarter mile of an existing or proposed school. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

According to the regulatory database search that was conducted for the proposed project (refer to Appendix E), the project site is not included in any hazardous materials databases pursuant to Government Code Section 65962.5. Implementation of the proposed project would not create a significant hazard to the public or the environment. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) 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?**

The proposed project is not located within two (2) mi of a public airport, and the project area is not located in any airport land use plan area. The proposed project would not result in an airport-related hazard for people accessing or working at the project area. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

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?**

The proposed project is not located within the vicinity of a private airstrip. Implementation of the proposed project would not result in an airstrip-related safety hazard for people accessing or working at the project site. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The Monterey County Emergency Operations Plan (2014) is applicable to the project area. It describes the actions that will be taken by the Monterey County Office of Emergency Services during natural, technical, and human-caused emergencies. The plan addresses both response and recovery efforts and discusses the procedures that the Office of Emergency Services and its partners use during an emergency. The Robinson Canyon Road Bridge would remain open to public use during construction and no traffic detours would be required. A temporary access road stemming from Robinson Canyon Road to the river would be created during construction. Advanced and end-construction signage will be placed 350 ft from the temporary access road entrance and 350 ft past the construction area, respectively. Because the bridge would remain open to public use during construction and no traffic detours would be required, construction of the proposed project would not impair or physically interfere with adopted emergency response or emergency evacuation plans.

The proposed project is a scour repair project. Operation of the proposed project would not result in a change in traffic volume or access to the project site. The proposed project would not interfere with existing emergency response times or adopted emergency response or evacuation plans and there would be no impact. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

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?**

The proposed project is located in a rural residential area, and is adjacent to urbanized areas or areas where residences are intermixed with wildlands. According to the CalFire Monterey County Fire Hazard Severity Zone Map, the proposed project site is located in a Very High Fire Hazard Severity Zone (VHFHSZ). However, the proposed project is a scour repair project, and would not alter the risk or impacts to residences of wildland fires as compared with the existing conditions. Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

4.9 HYDROLOGY AND WATER QUALITY

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
(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)?	☐	☐	☒	☐
(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 a substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
(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 above pre-development condition in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
(e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff??	☐	☒	☐	☐
(f)	Otherwise substantially degrade water quality?	☐	☒	☐	☐
(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?	☐	☐	☐	☒
(h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(j)	Cause inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Impact Analysis:

The discussion and analysis provided in this section is based on the *Water Quality Memorandum* (LSA, October 2016) and the *Location Hydraulic Study* (Wreco, February 2017) (refer to Appendices F and G)

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

Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed and there would be an increased potential for soil erosion and transport of sediment downstream compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. Additionally, construction-related pollutants such as liquid and petroleum products and concrete-related waste to be spilled or

transported via storm runoff into adjacent drainages and into downstream receiving waters. Any of these pollutants have the potential to be transported via storm water runoff into receiving waters (i.e., the Carmel River).

Construction in the river would occur outside of the rainy season, when surface water in the Carmel River is at its seasonal minimum. However, because the Carmel River has perennial flow, diversion of streamflow around the work area in the river would be required. Two (2) dams would be installed in the Carmel River, one (1) on each side of the existing bridge, to provide access for construction equipment as well as a contractor work area. Pipes would be installed in the river, passing through the dam structure, to divert water only around the construction work area at the existing bridge while still allowing perennial flow to be conveyed in the portion of the river where no work is being done. After construction is complete, the contractor would remove the temporary dams and pipes and restore the river and disturbed areas to preconstruction conditions Limiting construction outside of any areas with water present within the Carmel River channel would reduce the potential for construction activities to contribute pollutants to downstream receiving waters.

During construction, the total disturbed area would be approximately 3.7 acres. Because the proposed project disturbs greater than one (1) acre of soil, the proposed project is subject to the requirements of the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002) (Construction General Permit), as specified in **Compliance Measure WQ-1**. The proposed project is also required to comply with the provisions of the Monterey County Erosion Control Ordinance (Municipal Code Title 16, Chapter 16.12) as specified in **Compliance Measure WQ-2**.

In compliance with the Construction General Permit and County Municipal Code, the construction contractor would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and Erosion Control Plan, respectively, and implement Construction BMPs detailed in the SWPPP and Erosion Control Plan during construction activities. Construction BMPs would include Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, and Good Housekeeping BMP's to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

In addition, effluent monitoring for pH and turbidity would be required during storm events to ensure that the proposed project is not resulting in pH and turbidity levels exceeding the Numeric Action Levels established in the Construction General Permit. When Construction BMPs are properly designed, implemented, and maintained to address pollutants of concern, as required in **Compliance Measures WQ-1 and WQ-2**, pollutants of concern would be retained on the project area so they would not reach receiving waters. Water quality sampling would ensure the BMPs are reducing pollutants in storm water runoff to below the Numeric Action Levels. For these reasons, with implementation of **Compliance Measures WQ-1, and WQ-2** construction of the proposed project would result in a less than significant impact associated with the violation of water quality standards and waste discharge requirements. No mitigation is required.

Depth to groundwater in the project area was measured to occur at a depth of approximately nine (9) ft below the existing grade. Groundwater levels may vary with the passage of time due to factors including seasonal groundwater fluctuation, local irrigation practice, surface and subsurface flows, ground surface run-off, water level in the river, and rainfall amounts (especially during a drought or El Nino event). Due to fluctuating groundwater levels in the project area, groundwater dewatering during construction may be required. Groundwater may contain elevated levels of Total Dissolved Solids, salinity, nitrates, or other constituents that could affect surface water quality when discharged into the Carmel River. As specified in **Compliance Measure WQ-3**, groundwater dewatering during construction would be conducted in accordance with the requirements of the Low Threat Discharge Permit. This order requires testing and treatment, as necessary, of groundwater extracted during construction prior to its release into surface waters to ensure that effluent limitations for constituents are not exceeded. As a result, groundwater dewatering during project construction would not introduce pollutants to receiving waters or violate water quality standards or waste discharge requirements. Adherence to **Compliance Measure WQ-3** would ensure that if dewatering is required during construction, the proposed project would result in a less than significant impact to water quality standards and waste discharge requirements. No mitigation is required.

The proposed project is a scour repair project and would not involve modification of Robinson Canyon Road or Robinson Canyon Road Bridge beyond installation of scour protection. No storm drain facilities would be constructed as part of the proposed project. As under existing conditions, storm water runoff from the proposed project would run off the road into adjacent properties or into the Carmel River. Because the area disturbed during construction would be restored to preconstruction conditions, the proposed project would maintain the existing drainage pattern in the project area and all storm water runoff from the project area would continue to flow into the Carmel River or into adjacent properties. Installation of scour protection at the substructure of the bridge would reduce the potential for future scouring at the bridge foundations, which would reduce sediments in the water and improve water quality. The project operation would result in an overall beneficial impact to water quality.

Significance Determination: Potentially Significant.

Mitigation and/or C**ompliance Measures:** No mitigation is required. However, the following Compliance Measures are standard conditions based on local, State, and federal regulations or laws that serve to reduce impacts related to hydrology and water quality. These Compliance Measures are applicable to the proposed project and shall be incorporated to ensure that the proposed project has minimal impacts to receiving waters.

Compliance Measure WQ-1 **Construction General Permit.** Prior to commencement of construction activities, the proposed project shall obtain coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, as amended by

2010-0014-DWG and 2012- 0006-DWQ, NPDES No. CAS000002, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent (NOI) for coverage under the permit to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained from SMARTS. The proposed project shall comply with the Risk Level 2 requirements of the Construction General Permit. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and include Best Management Practices (BMPs) to ensure that the potential for soil erosion, sedimentation, and spills is minimized and to control the discharge of pollutants in storm water runoff as a result of construction activities. Upon completion of construction, a Notice of Termination (NOT) shall be submitted via SMARTS.

Compliance Measure WQ-2 **Erosion Control Plan.** During the plans, specifications, and estimates (PS&E) phase, an Erosion Control Plan shall be prepared and implemented by the County or its designated contractor in compliance with the provisions of the Monterey County Erosion Control Ordinance (Municipal Code, Title 16, Chapter 16.12). The Erosion Control Plan shall indicate the proposed methods for the control of runoff, erosion, and sediment movement during project construction.

Compliance Measure WQ-3 **Construction Dewatering**. Prior to commencement of groundwater dewatering activities, the proposed project shall obtain coverage under the State Water Resources Control Board's Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality (Water Quality Order No. 2003-0003-DWQ). This shall include submission of a Notice of Intent (NOI) for coverage under the permit to the State Water Resources Control Board (SWRCB). Construction activities shall not commence until a letter is obtained from the SWRCB stating that the proposed project has obtained coverage under the permit. Construction dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related

discharges. Upon completion of groundwater dewatering activities, a Notice of Termination (NOT) shall be submitted to the SWRCB.

Significance Determination after Compliance: Less than Significant Impact.

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

Groundwater levels in the project area may fluctuate; groundwater dewatering may be required during construction. Groundwater dewatering would be temporary in nature and would cease following completion of construction. It is not anticipated that the volume of groundwater extracted during dewatering activities would be substantial in comparison to the overall volume of the groundwater basin. Additionally, soils within the Carmel River within the project area have high infiltration rates, which would allow dewatered groundwater that is discharged back into the Carmel River to infiltrate and offset any localized groundwater depletion. Construction activities associated with the proposed project would result in a less than significant impact associated with the depletion of groundwater supplies or interference with groundwater recharge. No mitigation is required.

Project operation would not require groundwater extraction. In addition, the proposed project would not increase impervious surface areas and would not affect long term groundwater infiltration. For these reasons, implementation of the proposed project would not result in long term impacts associated with depleting groundwater supplies or substantially interfering with groundwater recharge. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than significant impact.

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

Construction activities (e.g., installation of scour protection, water diversion, and equipment staging) would disturb soil and increase the potential for soil erosion and transport of sediment downstream. However, as specified in Compliance Measures WQ-1 and WQ-2 in Response 4.9 a), above, construction of the proposed project would comply with the requirements of the Construction General Permit and County Municipal Code. In compliance with the Construction General Permit and the Monterey County Erosion Control Ordinance, a

SWPPP and Erosion Control Plan would be prepared for the proposed project and Construction BMPs detailed in these plans would be implemented during construction activities to minimize erosion and siltation. Additionally, water within the Carmel River would be temporarily diverted around any scour repair work. Separating construction activities from the river flow and channelizing the flow would reduce the potential for erosion to occur within the river. For these reasons, adherence to Compliance Measures WQ-1 and WQ-2 would ensure that construction of the proposed project would result in a less than significant impact related to altering the existing drainage pattern of the project site during construction activities in a manner that would result in substantial erosion or siltation on- or off-site. No mitigation is required.

In the existing condition, storm water runoff flows off the road onto adjacent properties or into the Carmel River. Because the area disturbed during construction would be restored to preconstruction conditions, the proposed project would maintain the existing drainage pattern in the project area, and would not result in any substantial erosion or siltation on or off site. Additionally, installation of scour protection at the substructure of the bridge would reduce the potential for future scouring at the bridge foundations, which would reduce sediments in the water and improve water quality. Project operation would result in an overall beneficial impact related to erosion and siltation.

Significance Determination: Potentially Significant.

Mitigation and/or Compliance Measures: Refer to Compliance Measures WQ-1 and WQ-2 in Response 4.9 a), above.

Significance Determination after Compliance: Less than Significant Impact.

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 above pre-development condition in a manner which would result in flooding on- or off-site?**

During construction, soil would be disturbed and compacted and drainage patterns would be temporarily altered, which can increase the volume and velocity of storm water runoff and increase the potential for localized flooding compared to existing conditions. As discussed in Compliance Measures WQ-1 and WQ-2, in Response 4.9 a) above, the Construction General Permit and County Municipal Code require the preparation of a SWPPP and Erosion Control Plan and implementation of construction BMPs to control and direct surface runoff on-site. By controlling and directing surface runoff on-site, the BMPs will direct additional runoff into the Carmel River, which has additional capacity. Because additional runoff during construction will be channeled to the Carmel River, which has capacity, construction activities would not result in on- or off-site flooding. With adherence to Compliance Measures WQ-1 and WQ-2, construction impacts related to altering the existing drainage pattern of the site or area or increasing the rate or amount of surface runoff in a manner that would result in flooding on- or off-site would be less than significant. No mitigation is required.

As under existing conditions, storm water runoff flows from the road into adjacent properties or into the Carmel River. Because the area disturbed during construction would be restored to preconstruction conditions, operation of the proposed project would maintain the existing drainage pattern in the project area and storm water runoff from the project area would continue to flow into the Carmel River or adjacent properties. As a result, installation of scour protection at the substructure of the bridge would not alter the existing drainage pattern of the site or area, including through alteration of a stream or river, or substantially increase the rate or amount of surface runoff above pre-development condition in a manner that would result in flooding on or off site. No mitigation is required.

Significance Determination: Potentially Significant.

Mitigation and/or C**ompliance Measures:** Refer to Compliance Measures WQ-1 and WQ-2 in Response 4.9 a), above.

Significance Determination After Compliance: Less than Significant Impact.

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

As discussed in Response 4.9 d) above, earthwork activities would compact soil, which can increase storm water runoff during construction, and construction-related pollutants such as liquid and petroleum products and concrete related waste could be spilled, leaked, or transported via storm runoff into adjacent drainages and into downstream receiving waters. The proposed project would implement **Compliance Measures WQ-1** and **WQ-2,** which require compliance with the Construction General Permit and County Municipal Code. In compliance with Construction General Permit and County Municipal Code, a SWPPP and Erosion Control Plan would be implemented for the proposed project and construction BMPs implemented to control storm water runoff, including the discharge of pollutants. With adherence to **Compliance Measure WQ-1and WQ-2**, impacts related to the creation or contribution of runoff which would exceed the capacity of the storm water drainage system or provide substantial additional sources of polluted runoff would be less than significant. No mitigation is required.

As discussed under Response 4.9 a) above, groundwater dewatering may be required during construction. Groundwater may contain pollutants that could affect surface water quality when discharged into the Carmel River. As specified in **Compliance Measure WQ-3,** groundwater dewatering during construction would be conducted in accordance with the requirements of the Low Threat Discharge Permit. With adherence to **Compliance Measure WQ-3**, impacts associated with the introduction of substantial sources of polluted runoff from groundwater dewatering during construction would be less than significant. No mitigation is required.

The proposed project is a scour repair project and would not involve modification of Robinson Canyon Road or Robinson Canyon Bridge beyond installation of scour protection.

As under existing conditions, storm water runoff from the proposed project would run off the road into adjacent properties or into the Carmel River. Because the area disturbed during construction would be restored to preconstruction conditions, and the proposed project would maintain the existing drainage pattern of the project site and not contribute any additional runoff to storm water drainage systems. Installation of scour protection at the substructure of the bridge would reduce the potential for future scouring at the bridge foundations, which would reduce sediments in the water and improve water quality. The proposed project would result in an overall beneficial impact to water quality. Operation of the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Significance Determination: Potentially Significant.

Mitigation and/or C**ompliance Measures:** Refer to Compliance Measures WQ-1 and WQ-2 in Response 4.9 a) and e), above.

Significance Determination after Compliance: Less than Significant Impact.

f) **Otherwise substantially degrade water quality?**

Refer to Response 4.9 a), above.

Significance Determination: Potentially Significant.

Mitigation and/or C**ompliance Measures:** Refer to **Compliance Measures WQ-1, WQ-2, and WQ-3** in Response 4.9 a), above.

Significance Determination After Compliance: Less than Significant Impact.

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

The proposed project is a scour repair project and does not include a housing component. Implementation of the proposed project would not place housing within a 100-year flood hazard area and no impacts would occur. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

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

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06053C0345G (2009), a majority of the Carmel River within the project area is designated as a Zone AE regulatory floodway. In addition, a small portion of the project area is located within a Zone AE floodplain. Zone AE is defined as a 100-year (one percent [1%] annual chance flood) floodplain for which base flood elevations have been determined.

All of the scour countermeasures involve backfilling with native soil material over the scour countermeasures. Most of the features of the scour countermeasures will be at grade with the exception of the scour countermeasures at Pier 2, which would be placed above the original grade. The floodplain encroachment at Pier 2 would result in a slight increase in velocity and a decrease in water surface elevation of 0.02 feet downstream of the mounded scour countermeasure. The change in flood flows would only occur in the vicinity of the proposed scour countermeasure at Pier 2. The fill at Pier 2 would not redirect flood flows within the Carmel River. The proposed project would result in a less than significant impact related to impeding or redirecting flood flows as a result of placing structures within a 100-year flood hazard area. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation required.

Significance Determination After Mitigation: Less than Significant Impact.

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?

The existing bridge design passes the 100-year peak flow with 4.3 ft. freeboard[1]. The proposed scour countermeasures would result in a decrease in water surface elevation of 0.02 ft downstream of Pier 2, which would not affect freeboard. For the 50-year peak flow, there are no increases in water surface elevation; water would continue to pass under the bridge during 100-year storm events. The proposed project would not expose any people or structures to a significant risk of loss, injury, or death involving flooding.

No levees exist within the project area. There would be no exposure of people or structures to significant risk of loss, injury, or death involving flooding as a result of a levee failure.

Dam failure is defined as the structural collapse of a dam that releases the water stored in a reservoir behind the dam. A dam failure is usually the result of the age of the structure, inadequate spillway capacity, or structural damage caused by an earthquake or flood. The Carmel River originates in the Santa Lucia Mountains and flows northwest to the project area, historically passing through 2 dams: the San Clemente Dam and the Los Padres Dam.

[1] Freeboard: the difference in elevation between the water surface in the river and the underside of the bridge structure.

The San Clemente Dam was removed in 2015[1]; the Los Padres Damn located six (6) miles upstream was constructed in 1949[2] and remains in place today. The project site is located within the Los Padres Dam Inundation area.[3] The Los Padres dam is maintained and inspected to ensure its integrity and to ensure that risk of failure is minimized. The proposed project would install scour repairs within a dam inundation zone, which would not affect the dam or likelihood of failure. The proposed project would not increase vehicular traffic during project operations. The proposed project would not introduce additional people or structures to the project area, or expose additional people or structures to flooding as a result of dam or levee failure. Although construction workers would be present within the dam inundation zone during construction, Monterey County Office of Emergency Services has an Emergency Alert Program, which would alert the public to evacuate an area that is at risk (County of Monterey 2016). The risk to the proposed project associated with dam or levee failure would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

j) **Cause inundation by seiche, tsunami, or mudflow?**

Seiching is a phenomenon that occurs when seismic groundshaking induces standing waves (seiches) inside water retention facilities such as reservoirs and water tanks. Such waves can cause retention structures to fail and flood downstream properties. There are no water retention facilities located in close proximity to the project site. There are a few small waterbodies associated with nearby golf courses in close proximity to the project site; however, these small waterbodies would not create a large seiche that would put the project site at risk. The risk associated with possible seiche waves is not considered a potential constraint or a potentially significant impact. No mitigation is required.

Tsunami are generated wave trains generally caused by tectonic displacement of the seafloor associated with shallow earthquakes, seafloor landslides, rock falls, and exploding volcanic islands. The Robinson Canyon Road Bridge is not located in a tsunami inundation area as identified by the State of California Department of Conservation Tsunami Inundation Maps (California Department of Conservation 2016). Due to the distance of the proposed project from the ocean (greater than 7 mi) and its location outside of any tsunami inundation area, the risk associated with tsunami is not considered a potential constraint or a potentially significant impact. No mitigation is required.

Mudflows are described as downhill movement of soft, wet, unconsolidated earth and debris, made fluid by rain or melted snow and often building up great speed. Mudflows occur on

[1] Sanclementedamremoval.org
[2] Monterey County Multi-Jurisdictional Hazard Mitigation Plan
[3] Monterey County General Plan, Safety Element

steep slopes where vegetation is not sufficient to prevent rapid erosion but can occur on gentle slops if other conditions are met. Other factors are heavy precipitation in short periods and an easily erodible source material. According to Figure E-9 of the Monterey County Multi-Jurisdictional Hazard Mitigation Plan (Monterey County 2015), Landslide Hazard Areas, the project site is a low risk area for earthquake induces landslides. The risk associated with possible mudflows is not considered a potential constraint or a potentially significant impact. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

4.10 LAND USE/PLANNING

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Physically divide an established community?	☐	☐	☐	☒
(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, planned community, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
(c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Proposed project construction and operation would not result in impacts associated with land use and/or planning at the project site. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and land use/planning.

4.11 MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
(b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Proposed project construction and operation would not result in impacts to mineral resources. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and mineral resources.

4.12 NOISE

Would the project result in:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
(b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
(c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
(d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
(f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Analysis:

The discussion and analysis provided in this section is based on the *Technical Noise Memorandum* (LSA, August 2016) provided in Appendix H.

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?**

Two (2) types of short-term noise impacts would occur during project construction: 1) equipment delivery and construction worker commutes, and 2) project construction activities.

The Monterey County General Plan Policy S-7.9 stipulates that no construction activities pursuant to a County permit shall be allowed within 500 ft of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays, prior to completion of a noise mitigation study. Typically, when not specified in a policy or ordinance, daytime hours occur from 7:00 a.m. to 7:00 p.m. while evening and nighttime hours occur from 7:00 p.m. to 7:00 a.m.

Section 10.60.030 of the Monterey County Municipal Code prohibits the operation of any machine, mechanism, device, or contrivance which produces a noise level exceeding 85 A-weighted decibels (dBA) measured 50 ft from the point source.

Caltrans Standard Specifications requires noise levels from the contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., to be at or below 86 dBA maximum instantaneous noise level (L_{max}) at a distance of 50 ft from the job site.

Short-term construction noise would result from transporting construction equipment, materials, and construction workers to the project site. These transportation activities would incrementally raise noise levels on existing access roads leading to the project site. As shown in Table 4.12-1, the single-event noise from equipment trucks passing at a distance of 50 ft would reach a maximum level of 84 dBAL_{max}. However, heavy equipment for grading and construction activities would be moved on-site once, and then would remain onsite for the duration of each construction phase. This one time trip, when heavy construction equipment is moved on and off-site, would not add to the daily traffic noise in the project vicinity. Projected traffic from construction worker commutes would be minimal when compared to existing traffic volumes on Robinson Canyon Road and other affected streets, and its associated long-term noise level change would not be perceptible. Potential noise associated with impacts from equipment transport and construction worker commutes would be less than significant. No mitigation is required.

The second type of short-term noise impact is related to noise generated during project construction. Construction is performed in discrete steps, each having its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases change the character of the noise generated, as well as the noise levels in the project area as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4.12-1 lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments based on a distance of 50 ft between the equipment and a noise receptor.

In addition to standard construction equipment, the proposed project proposes use of a crane. If a crane is utilized during construction, as shown in Table 4.12-1, the crane would generate noise levels of approximately 85 dBA L_{max} at a distance of 50 ft. Normal construction operations, specifically during the site preparation phase which includes excavation and grading, may generate high noise levels from an active construction area. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, and front-end loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve one (1) or two (2) minutes of full-power operation followed by three (3) or four (4) minutes at lower power settings.

Noise associated with the use of earthmoving construction equipment is estimated between 55 and 85 dBA L_{max} at a distance of 50 ft from each piece of equipment. As seen in Table 4.12-1, the maximum noise level generated by each excavator, bulldozer and pick-up truck is assumed to be approximately 85 dBA $L_{max,}$ 85 dBA $L_{max,}$ and 55 dBA L_{max} at 50 ft, respectively. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level would be 88 dBA L_{max} at a distance of 50 ft from an active construction area.

Table 4.12-1: Typical Construction Equipment Noise Levels

Equipment Description	Maximum Noise Level (L_{max}) at 50 Ft [1]
Backhoes	80
Compactor (ground)	80
Cranes	85
Dozers	85
Dump Trucks	84
Excavators	85
Flat Bed Trucks	84
Front-end Loaders	80
Graders	85
Impact Pile Drivers	95
Jackhammers	85
Pick-up Truck	55
Pneumatic Tools	85
Pumps	77
Rock Drills	85
Rollers	85
Scrapers	85
Tractors	84

Source: *Federal Highway Administration Roadway Construction Noise Model* (January 2006).
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
Note: Noise levels reported in this table are rounded to the nearest whole number.
Ft = feet
L_{max} = maximum instantaneous sound level

The closest noise receptors are a single-family residence located at 28000 Robinson Canyon Road and the St. Dunstan's Episcopal School and Church located between the southern edge of the Robinson Canyon Road Bridge and Old Ranch Road. The single-family residence is located approximately 225 ft from the limits of the construction area and 50 ft from the nearest staging area. Given its distance from the construction area, this residence may be subject to short-term noise reaching 77 dBA L_{max}. The St. Dunstan's Episcopal School is located approximately 355 ft from the limits of the construction area and 185 ft from the nearest staging area and the St. Dunstan's Episcopal Church is located approximately 410 ft from the limits of the construction area and 180 ft from the nearest staging area. Given the school and church's distance from the construction area, both facilities may be subject to short-term noise reaching 73 dBA L_{max}. The maximum short-term construction noise at these three (3) noise receptors would be below noise level standards established by both the County (85 dBA at a distance of 50 ft from the job site) and Caltrans (86 dBA at a distance of 50 ft from the job site). The proposed project would not expose people or generate noise levels in excess of County or Caltrans standards. No mitigation is required.

The proposed project is a scour repair project. Implementation of the proposed project would not generate additional vehicular traffic on the bridge or roadway approaches compared to existing conditions. Operation of the proposed project would not result in any long-term changes in noise sources or noise levels in the project area beyond the existing conditions. Operation of the proposed project will not expose people to or generate noise levels in excess of established County or Caltrans standards. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation/Compliance Measures: No Impact.

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

Groundborne noise in buildings and structures is produced when interior surfaces such as walls and floors are "excited" into motion by groundborne vibration transmitted into a given structure. In general, groundborne vibration from standard construction practices is only a potential structural damage issue when within 25 ft of sensitive structures. Because construction is not proposed within 25 ft of any sensitive or fragile structures, the potential impact of groundborne vibration on sensitive structures in the project vicinity is considered less than significant. No mitigation is required.

The proposed project is a scour repair project, and implementation of the proposed project would not generate additional vehicular traffic. Operation of the proposed project would not be a source of substantial groundborne vibration, and would not expose persons to excessive levels of groundborne noise or groundborne vibration. The proposed project would not result in long-term operational impacts associated with groundborne vibration or noise levels. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation/Compliance: No Impact.

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

The proposed project is a scour repair project. The proposed project would not generate additional vehicular traffic on the bridge or roadway approaches during project operations as compared to existing conditions. Noise levels associated with operation of the proposed project would not change with implementation of the proposed project. Operation of the

proposed project would not result in any substantial permanent increase in ambient noise levels in the project vicinity. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or Compliance Measures: No mitigation is required.

Significance Determination After Mitigation: No Impact.

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

Refer to Response 4.12 a) and 4.12 b) above. The proposed project would result in short-term increases in noise levels from construction deliveries, commuting construction workers, and operation of construction equipment. However, short-term increases in construction-related noise levels would not exceed County or Caltrans noise standards and would cease following completion of construction. Potential short-term increases in ambient noise levels due to construction activities would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact

Mitigation and/or Compliance Measures: No mitigation is required.

Significance Determination After Mitigation/Compliance: Less than Significant Impact.

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?**

The proposed project is not located in an airport land use plan or within two (2) mi of a public airport. Implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels. No mitigation is required.

Significance Determination: No Impact.

Mitigation and/or Compliance Measures: No mitigation is required.

Significance Determination After Mitigation: No Impact.

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?**

The proposed project is not located within the vicinity of a private airstrip. Implementation of the proposed project would not expose people residing or working in the area to excessive noise levels. No mitigation is required.

Significance Determination: No Impact.
Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: No Impact.

4.13 POPULATION AND HOUSING.

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Proposed project construction and operation would not result in impacts to population and housing. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project as it relates to population and housing.

4.14 PUBLIC SERVICES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Would the project result in substantial adverse physical impacts associated with the provision of or 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:				
	i) Fire Protection?	☐	☐	☐	☒
	ii) Police Protection?	☐	☐	☐	☒
	iii) Schools?	☐	☐	☐	☒
	iv) Parks?	☐	☐	☐	☒
	v) Other public facilities?	☐	☐	☐	☒

Proposed project construction and operation would not result in impacts to public services. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and public services.

4.15 RECREATION

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Proposed project construction and operation would not result in recreation impacts. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and recreation.

4.16 TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
(b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
(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?	☐	☐	☐	☒
(d)	Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
(e)	Result in inadequate emergency access?	☐	☐	☒	☐
(f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

The analysis in this section relies upon the Construction Traffic Analysis Memorandum (TRC 2017), provided in Appendix I.

Impact Analysis:

a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The proposed project is a bridge scour repair project. The proposed project does not include work to Robinson Canyon Road and project operations would not result in any permanent changes to current uses or traffic volumes at the project site.

Proposed project construction would last for an approximately four (4) month period, during which time, Robinson Canyon Road will remain open. Additional vehicle trips will be generated during the construction period in order to accommodate: 1) moving construction equipment on site, which is estimated to be approximately five (5) to ten (10) trucks per day during the first ten (10) days of construction and then approximately five (5) daily truck trips during the remaining construction period; and 2) employee vehicles, which is estimated to be

approximately 20 trips (ten [10] round trips) per day. To provide the most conservative construction traffic estimate, the traffic analysis assumed that employees would drive to the site in separate vehicles (i.e., no carpooling) and arrive and depart during the peak hours and that truck traffic would be evenly spaced throughout the eight (8) hour day. Using these assumptions, construction traffic (e.g., worker commutes and equipment delivery) is expected to add 20 average daily trips (ADT) to the roadways adjacent to the project site, including 13 trips during both the a.m. and p.m. peak hours. The number of construction trips generated by the proposed project is nominal when compared to the existing ADT volume of each roadway segment (refer to Table 4.16-1 below).

Table 4.16-1: Existing Roadway Levels of Service

Roadway	Segment	ADT Volume	Classification	LOS
Robinson Canyon Road	At the bridge over the Carmel River	4,000	Local Rural Collector	A
Carmel Valley Road	Schulte Road to Robinson Canyon Road	14,600	Major Collector	D

The additional traffic generated by construction-related vehicle trips would not impede normal traffic flows or circulation in the project area. Given the fact that construction traffic would not affect normal traffic flow or circulation in the project area combined with the fact that this is not a critical link in the public transportation system in Monterey County, that there are no designated bicycle facilities on the bridge and that there is an existing separated walkway on bridge but it is not part of or connected to any adjacent pedestrians walkways and is not part of a more extensive pedestrian walkway system, the proposed project would have a less than significant impact associated with conflicts with an applicable transportation, pedestrian, bicycle or mass transit plan, ordinance or policy. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or Compliance Measures: No mitigation is required.

Significance Determination After Mitigation/Compliance: Less than Significant Impact.

b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

TAMC is the designated Congestion Management Agency (CMA), Regional Transportation Planning Agency (RTPA), Local Transportation Commission (LTC), and Service Authority for Freeways and Expressways (SAFE) for Monterey County. The mission of TAMC is to

proactively plan and fund a transportation system that enhances mobility, safety, access, environmental quality, and economic activities by serving the needs of Monterey County residents, businesses, and visitors. TAMC prepares the Regional Transportation Plan (RTP) every four (4) years, which provides a basis for actions to allocate state and federal funding to transportation projects within Monterey County. TAMC has adopted an LOS standard of D for planning purposes.

The project site is within Monterey County. Given the size and scale of the proposed scour repair (i.e., no detours or road closures), neither project operations nor project construction would conflict with any applicable LOS standards, travel demand measures, or other standards by the County CMA (TAMC). The proposed project would not conflict with an applicable congestion management program and impacts would be less than significant. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation/Compliance: Less than Significant Impact.

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?**

The proposed project is a bridge scour repair project. Construction and operation of the proposed project would not increase traffic levels or change the location of traffic such that the proposed project would have an impact to air traffic patterns that would result in a substantial safety risk. No mitigation is required.

Significance Determination: No Impact.

Mitigation/Compliance Measures: No mitigation is required.

Significance Determination after Mitigation/Compliance: No Impact.

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

The proposed project is a bridge scour repair project. Implementation of the proposed project does not include any work on Robinson Canyon Road. Neither project construction nor project operations would substantially increase hazards due to a design feature or an incompatible use. There would be no proposed project-related impact associated with an increased hazard due to a design feature or incompatible use. No mitigation is required.

Significance Determination: No Impact.
Mitigation/Compliance Measures: No mitigation is required.

Significance Determination after Mitigation/Compliance: No Impact.

e) **Result in inadequate emergency access?**

Emergency services in the proposed project area are provided by CALFIRE for fire and emergency services, and by the Monterey County Sheriff's Department for police services. The proposed project is a bridge scour repair project and would not construct any structures for occupancy that would require additional emergency services during operation of the proposed project.

Proposed project construction would last approximately four (4) months, and would not require any road closures. Implementation of the proposed project would not alter travel times for emergency service vehicles using Robinson Canyon Road. Although the additional traffic from construction vehicles to the project site is not expected to result in a significant impact on the surrounding roadways, minor impacts and inconveniences to travelers would be minimized or avoided by preparing a Traffic Management Plan (TMP). Impacts to emergency services would be less than significant.

Significance Determination: Less than Significant.

Mitigation and/or Compliance Measures: Mitigation Measure TR-1: Traffic Management Plan. Prior to construction, the construction contractor shall be required to submit a Traffic Management Plan (TMP) to the County of Monterey Director of Public Works or appropriate designee for review and approval. During construction, the County shall require the Construction Contractor to adhere to all requirements of the TMP. The TMP shall include the following: installation of detour signs, notices of road closures, if necessary, in local media, and advance notice to the public and local emergency service providers regarding the timing, location, and duration of construction activities.

Significance Determination After Mitigation: Less than Significant.

f) **Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

The proposed project is a scour repair project and does not include any work on Robinson Canyon Road. There is an existing separated walkway on Robinson Canyon Road Bridge but there is not a designated bicycle facility. Implementation of the proposed project would not involve any modifications or impacts to the existing walkway or add any additional

pedestrian or bicycle facilities. Other forms of public transit, such as bus lines, do not operate along Robinson Canyon Road. Neither operation of construction of the proposed project would conflict with adopted polices, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation. No mitigation is required.

Significance Determination: No Impact.

Mitigation/Compliance Measures: No mitigation is required.

Significance Determination after Mitigation/Compliance: No Impact.

4.17 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a) Listed or eligible for the listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	☐	☐	☐	☒
(b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Impact Analysis:

The discussion and analysis provided in this section is based on the *Historic Property Survey Report (HPSR)* (LSA, August 2016) (refer to Appendix C). The consultation study area for tribal cultural resources is the Area of Potential Effects (APE), which is the area where ground-disturbing activities would occur, and includes the maximum extent of ground disturbance, including access routes, staging, and work areas.

a) **Listed or eligible for the listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

Records search #14-1422 was conducted at the Northwest Information Center (NWIC) on April 16, 2015. The records search included a review of the National Register of Historic Places, the California Register of Historic Places, the California Inventory of Historic Resources, California Historical Landmarks, California Points of Historical Interest, the California Historical Resources Information System, and the Caltrans Historic Highway Bridge Inventory. The records search did not identify any tribal cultural resources in the APE or a one (1) mile radius of the APE.

On June 14, 2016 the County of Monterey RMA - Public Works & Facilities met with tribal representatives from the Oholone Costanoan Esselen Nation (OCEN) pursuant to the consultation requirements of AB 52. No listed or eligible tribal cultural resources were identified during the meeting.

The proposed project would not cause a substantial adverse change in a California Native American tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources, as defined in Public Resources Code section 5020.1(k).

Significance Determination: No Impact.

Mitigation/Compliance Measures and/or Standard Conditions: No mitigation is required.

Significance Determination After Mitigation: No Impact.

b) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

On June 14, 2016 the County of Monterey RMA - Public Works & Facilities met with tribal representatives from the Oholone Costanoan Esselen Nation (OCEN) pursuant to the consultation requirements of AB 52. As part of the consultation, tribal representatives did not provide substantial evidence of any tribal cultural resources occurring in or within the vicinity of the APE.

Nevertheless, the Chairwoman of the OCEN requested that a designated tribal representative be present to monitor ground-disturbing activities and in the event of a discovery, artifacts identified during construction shall be returned to the OCEN. The designated monitor was identified during the meeting. The County RMA - Public Works & Facilities agreed to the requirement that a designated tribal representative monitor ground-disturbing activities and the return of any artifacts identified during construction to the OCEN. The Esselen tribal representative stated that no additional measures to address potential impacts to tribal cultural resources were necessary or warranted.

The implementation of **Mitigation Measure TCR-1** would satisfy the agreement between the County and tribal representatives under AB 52 and reduce potential impacts from the proposed project to a less-than-significant level. In the unlikely event that previously unidentified archaeological resources are discovered by the tribal monitor implementation of **Compliance Measure CULT-1** would be required. Compliance with existing regulations as specified in **Compliance Measure CULT-1** would reduce the potential for impacts to unidentified archaeological resources to a less than significant level.

Significance Determination: Less than Significant Impact.

Mitigation /C**ompliance Measures and/or Standard Conditions:**

Mitigation Measure TCR-1: **Tribal Cultural Resources Monitoring and Artifact Return:** Prior to construction, the County of Monterey RMA - Public Works & Facilities shall contact the Ohlone Costanoan Esselen Nation (OCEN) and request that it submit the name of the designated monitor.

The designated OCEN monitor shall be on-site during all ground-disturbing activities.

Should a tribal cultural resource be encountered during ground-disturbing activities, all ground-disturbing activities within 25 feet shall be redirected and the OCEN monitor shall assess the resource, consult with the County of Monterey, and make recommendations for the treatment of the discovery. The County shall be notified by the OCEN monitor within 24 hours of the encounter. If found to be significant by the OCEN monitor, the County shall be responsible for implementing and funding appropriate mitigation measures. Mitigation measures may include, but would not be limited to, recording the tribal cultural resource, data recovery and analysis, and public outreach. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the OCEN monitor and submitted to the County for review. Any artifacts or significant tribal cultural resources discovered during ground-disturbing activities shall be given to an OCEN tribal representative.

Refer to Section 4.5: Cultural Resources for measures pertaining to unidentified archaeological, historical, or paleontological resources, or discovery of human remains.

Significance Determination After Mitigation: Less than Significant Impact.

4.18 UTILITIES/SERVICE SYSTEMS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
(g)	Comply with federal, state, and local statutes and regulations related to solid wastes.	☐	☐	☐	☒

Proposed project construction and operation would not result in impacts to utilities/service systems. No analysis is required. Refer to Section 3.0, Environmental Factors Potentially Affected and Determination for a more detailed discussion about the proposed project and utilities/service systems.

4.19 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
(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?	☐	☒	☐	☐
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)	☐	☐	☒	☐
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion/Conclusion/Mitigation:

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?**

As discussed in Section 4.4, Biological Resources, the proposed project has the potential to result in impacts to biological resources. The proposed project has the potential to adversely impact special-status species, including California red-legged frog, South/Central Coast Steelhead DPS, two-striped garter snake, western pond turtle, and Monterey big-eared woodrat during construction. With the implementation of **Mitigation Measures BIO-1 through BIO-7, BIO-9, BIO-11 through BIO-19, HAZ-1, WQ-1, PBO-7 and PBO-12,** potential impacts to special-status species would be reduced to less than significant levels. Construction of the proposed project has the potential to adversely impact migratory birds and raptors protected under the MBTA during the nesting season. With implementation of **Mitigation Measure BIO-23 through 25**, potential impacts to migratory birds and raptors would be reduced to less than significant levels. In addition, construction of the proposed project would result in temporary and permanent impact to two (2) sensitive natural habitats/plant species of special concern: the *Alnus rhombifolia* forest alliance and riverine community. However, potential impacts would be reduced to less than significant levels with implementation of **Mitigation Measures BIO-3, BIO-7 through BIO-9, BIO-18, and BIO-20.** Construction of the proposed project would result in temporary impacts to the movement of native resident or migratory fish or wildlife species, but these impacts would be reduced to a less than significant level with implementation of **Mitigation Measures BIO-11 and BIO-19, and PBO-12**.

As discussed in Section 4.5, Cultural Resources, the proposed project is not expected to result in any significant impacts to any examples of the major periods of California history or prehistory. No historic cultural or archaeological resources as defined by CEQA were identified in the APE. However, because the proposed project includes excavation it has the potential to impact unknown buried archaeological resources, paleontological resources, and human remains. **Compliance Measure CULT-1** requires consultation with a qualified archaeologist or paleontologist if unknown archaeological or paleontological materials are discovered during construction activities. Similarly, **Compliance Measure CULT-2** requires that proper authorities be notified and standard procedures be followed for the respectful handling of human remains if unknown human remains are discovered during construction activities. Implementation of **Compliance Measures CULT-1** and **CULT-2** would reduce any potential impacts to previously undiscovered archaeological or paleontological resources or human remains to a less than significant level.

With implementation of **Mitigation Measures BIO-1 through BIO-25** and **PBO-1 through PBO-19**, and **Compliance Measures CULT-1 and CULT-2**, the potential for the proposed project 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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory would be less than significant.

Significance Determination: Potentially Significant Impact.

Mitigation and/or C**ompliance Measures:** Refer to **Mitigation Measures BIO-1 through BIO-25** and **PBO-1 through PBO-19**, under Section 4.4, Biological Resources, and **Compliance Measures CULT-1 and CULT-2**, under Section 4.5, Cultural Resources.

Significance Determination After Mitigation: Less than Significant Impact.

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?)

Section 15065(a)(3) of the CEQA Guidelines states that a project's cumulative impacts are the possible environmental effects that may be cumulatively considerable when considered with other reasonable foreseeable projects. Cumulatively considerable impacts occur when the incremental effects of a particular project or program are significant when viewed in connection with the effects of other past, current, or reasonably foreseeable future projects. Section 15355 of the CEQA Guidelines defines a cumulative impact as an impact which is created as a result of the combination of the project evaluated in the CEQA document together with other projects causing related impacts. The proposed project is not located in the vicinity of any probable current or future projects as identified by the County. As shown in the discussion above, environmental impacts associated with the proposed project can be reduced to less than significant through standard or project-specific mitigation measures. The

impacts relevant to the proposed project are localized and confined to the immediate project area. Given that the potential project-related impacts are less than significant and limited and there are no current or future projects scheduled for development within the project area, implementation of the proposed project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects, or the effects of probable future projects. No mitigation is required.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

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

The proposed project includes installation of scour protection at the substructure of the Robinson Canyon Road Bridge. Implementation of the proposed project would reduce the potential for future scouring at the bridge foundation. As shown in the discussion above, environmental impacts, including those that may have a direct or indirect adverse effect on humans (i.e., air quality and greenhouse gas emissions), that are associated with the proposed project can be reduced to less than significant through standard or project-specific mitigation measures. The proposed project would not result in environmental effects which would cause a substantial adverse effect on human beings either directly or indirectly.

Significance Determination: Less than Significant Impact.

Mitigation and/or C**ompliance Measures:** No mitigation is required.

Significance Determination After Mitigation: Less than Significant Impact.

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5.0 FISH AND WILDLIFE ENVIRONMENTAL DOCUMENT FEES

A. Assessment of Fee

The State Legislature, through the enactment of Senate Bill (SB) 1535, revoked the authority of lead agencies to determine that a project subject to California Environmental Quality Act (CEQA) review had a "de minimus" (minimal) effect on fish and wildlife resources under the jurisdiction of the California Department of Fish and Wildlife (CDFW). Projects that were determined to have a "de minimus" effect were exempt from payment of the filing fees.

SB 1535 has eliminated the provision for a determination of "de minimus" effect by the lead agency. Consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the CDFW determines that the project would have no effect on fish and wildlife resources.

To be considered for determination of "no effect" on fish and wildlife resources, development applicants must submit a form requesting such determination to the CDFW. Forms may be obtained by contacting the agency by telephone at (916) 631-0606 or through its website at www.wildlife.ca.gov.

B. Conclusion

The project will be required to pay the fee.

C. Evidence

Based on the record as a whole as embodied in the RMA-Public Works & Facilities, files pertaining to Project File Number 3851 and the attached Initial Study/Proposed Mitigated Negative Declaration.

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6.0 MITIGATION MONITORING AND REPORTING PLAN

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7.0 REFERENCES

Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

California American Water. San Clemente Dam Removal and Carmel River Reroute Project Website. http://www.sanclementedamremoval.org/ (accessed January 2017).

California Department of Conservation. 1983. *Mineral Land Classification Map – Seaside Quadrangle (SR-146 Plate 4.13).* Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/ (accessed January 2017).

———. 014. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/ciff/ciff.html (accessed January 2017).

———. 2016. Monterey County Williamson Act FY 2015/2016. Website: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/ (accessed January 2017).

EDR. 2017. EDR Radius Map Report with GeoCheck.

LSA Associates, Inc. 2017. *Robinson Canyon Road Bridge Scour Repair Natural Environment Study.*

———. 2016. *Historic Property Survey Report.*

———. 2016. *Robinson Canyon Road Bridge Scour Repair Project Technical Noise Memorandum.*

———. 2016. *Water Quality Memorandum.*

Monterey County. 2016. Monterey County Code. Website: https://www.municode.com/library/ca/monterey_county/codes/code_of_ordinances (accessed January 2017).

———. 2014. Monterey County Multi-Jurisdictional Hazard Mitigation Plan. https://www.co.monterey.ca.us/oes/documents/Main_Plan_Body.pdf (accessed January 2017).

Monterey County. 2010. Safety Element.

Monterey County GIS – Open Data. 2010. Land Use Adopted 2010 (spatial data). Website: http://montereycountyopendata-1.montereyco.opendata.arcgis.com/datasets/99dd13ec069d43c1bfcbe60fdeef9b52_0 (accessed January 2017).

———. 2016. Zoning (spatial data). Website: http://montereycountyopendata-1.montereyco.opendata.arcgis.com/datasets/a1482b9f1d6a401cab03d684c3dfb524_0 (accessed January 2017).

Monterey County Office of Emergency Services. 2014. *Monterey County Emergency Operations Plan.* Website: http://www.co.monterey.ca.us/government/departments-a-h/administrative-office/office-of-emergency-services/the-operational-area (accessed 2/2/2017).

Monterey County Regional Fire District. *Stations.* Website: http://www.mcrfd.org/stations.html (accessed January 2017).

Monterey County Resource Management Agency - Planning. 2010, revised 2013. *2010 Monterey County General Plan – Carmel Valley Master Plan.* Website: http://co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/resources-documents/2010-general-plan (accessed January 2017).

Monterey County Resource Management Agency - Planning. 2010. *2010 Monterey County General Plan.* Website: http://co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/resources-documents/2010-general-plan (accessed January 2017).

Monterey County Sheriff's Office. 2016. *Patrol Division.* Website: https://www.montereysheriff.org/patrol/ (accessed January 2017).

Parikh Consultants, Inc. 2017. *Geotechnical Engineering Data Report.*

State of California, California State Transportation Agency, Department of Transportation, 2011. *Traffic Noise Analysis Protocol.*

———. 2015. *Standard Specifications.*

APPENDIX A

AIR QUALITY MODELING WORKSHEETS

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APPENDIX B

NATURAL ENVIRONMENT STUDY

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APPENDIX C

HISTORIC PROPERTY SURVEY REPORT

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APPENDIX D

GEOTECHNICAL ENGINEERING REPORT

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APPENDIX E

EDR RADIUS MAP REPORT WITH GEOCHECK

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APPENDIX F

WATER QUALITY MEMORANDUM

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APPENDIX G

LOCATION HYDRAULIC STUDY

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APPENDIX H

TECHNICAL NOISE MEMORANDUM

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APPENDIX I

CONSTRUCTION TRAFFIC ANALYSIS

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