RE-CIRCULATED: INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

HIRSCHDALE ROAD BRIDGES PROJECT

NEVADA COUNTY, CALIFORNIA





April 2019

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HIRSCHDALE ROAD BRIDGES PROJECT

NEVADA COUNTY, CALIFORNIA BRLO NO. 5917 (092) BRLO NO. 5917 (097)

Submitted to:

Nevada County Department of Public Works 950 Maidu Avenue Nevada City, California 95959-8600

Prepared by:

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April 2019

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1.0 INTRODUCTION

The Nevada County Department of Public Works, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the one-lane, five-span Truckee River Bridge on Hirschdale Road (Bridge # 17C-0045) in Nevada County, California, with a one-lane, two-span bridge. The project also includes rehabilitation and seismic retrofit of the one-lane Hirschdale Road UPRR Overhead (Bridge # 17C-0046). The two bridges carry Hirschdale Road over the Truckee River and two UPRR tracks approximately 1.2 miles south of Interstate 80. Hirschdale Road provides access to the Truckee River, UPRR, U.S. Forest Service land, several private properties, and is planned to be an important link in the Nevada County portion of the Tahoe-Pyramid Bike Trail.

The **Truckee River Bridge** on Hirschdale Road, constructed in 1926, spans the Truckee River in an eastwest direction with the river flowing in a north to south direction. Hirschdale Road has two travel lanes (total 24 feet) west of the bridge and changes to one travel lane (approximately 20 feet wide) to the east after the bridge. The existing bridge is a 5-span reinforced concrete girder bridge with concrete piers and abutments. The end spans are approximately 36.6 feet and 34.0 feet with the interior spans of 60 feet for a total bridge length of 250 feet long. Caltrans maintenance inspection records show that the bridge is structurally deficient and requires superstructure replacement to address load rating deficiencies. Hydraulic analysis shows potential river scour below the foundations. In response, Nevada County Department of Public Works proposes to replace the bridge with a combination of local and Highway Bridge Program funds for preliminary engineering, environmental, permitting, right-of-way, construction, and construction engineering.

The **Hirschdale Road Overhead** was also constructed in 1926 and spans 2 tracks of the UPRR in an eastwest direction. Hirschdale Road is a 20-foot-wide one-lane unstriped road at this location. The road ends 1.1 miles past the bridge, with no other public outlets. The existing bridge is a 4-span reinforced concrete girder bridge with concrete piers and abutments. Caltrans maintenance inspection records show that the bridge is functionally obsolete and requires substructure and superstructure rehabilitations to extend its useful life. In response, Nevada County Department of Public Works proposes to seismically retrofit and rehabilitate the bridge with a combination of local and Highway Bridge Program funds for preliminary engineering, environmental, Union Pacific Railroad coordination, construction, and construction engineering. No permanent right-of-way acquisition will be necessary from UPRR.

The purpose of the Hirschdale Road Bridges Project is to replace the Truckee River Bridge and structurally improve the Hirschdale Road UPRR Overhead to provide an additional 30 to 40 years of service life to support public access and use of this section of Hirschdale Road.

The Truckee River Bridge needs replacement to address the structurally deficient spans and channel scour concerns at the piers and the UPRR Overhead needs rehabilitation to address major deterioration in the substructure and superstructures. The project is also needed to improve safety as these bridges make up the only public access to Hirschdale Road beyond the Truckee River crossing.

1.1 ENVIRONMENTAL REVIEW

The Hirschdale Road Bridges Project by Nevada County constitutes a "project" in accordance with the State of California Environmental Quality Act (CEQA) Guidelines. Prior to approving the project, Nevada County must conduct an environmental review of the project in accordance with CEQA to determine the appropriate type of CEQA compliance document that would be necessary for the project.

In February of 2014, an Initial Study with Proposed Mitigated Negative Declaration was circulated for the project, as removal of both the Truckee River Bridge on Hirschdale Road, and the Hirschdale Road

Overhead. However, due to public comment and subsequent changes in the scope and size of the project, the Initial Study with Proposed Mitigated Negative Declaration was revised and is being recirculated.

This Mitigated Negative Declaration has been prepared because it has been determined that all potentially significant impacts from implementation of the proposed project can be mitigated to less than significant levels

1.2 SUMMARY INFORMATION

- 1. Project Title: Hirschdale Road Bridges Project
- 2. Lead Agency Name and Address:

Nevada County Department of Public Works 950 Maidu Avenue Nevada City, California 95959-8600

- 3. Contact Person and Phone Number: Patrick Perkins Project Manager (530) 265-1712
- 4. **Project Location:** The project site is located in Eastern Nevada County approximately 6 miles east of the Town of Truckee and encompasses two adjacent sites located on Hirschdale Road: the Truckee River Bridge, Bridge Number: 17C-0045, and the Hirschdale Road Overhead, Bridge Number 17C-0046. Figure 1. Project Vicinity and Figure 2. Project Location.
- 5. Project Sponsor's Name and Address:

Nevada County Department of Public Works 950 Maidu Avenue Nevada City, California 95959-8600

- 6. **General Plan Designation:** The Nevada County General Plan designates the land within and surrounding the proposed project as Estate, Planned Development (Forest 160, 1800 acres; remainder 265 dwelling units), Open Space, and Rural 30.
- 7. **Zoning:** Nevada County Zoning classifies the parcels associated with the project as Residential Agricultural with a 3-acre maximum density (RA-3), General Agricultural (AG-30), Open Space (OS), and Interim Development Reserve (IDR).

8. Description of Project:

Proposed Project

Initially, the two Hirschdale Road bridges, one over the Truckee River and one over the Union Pacific Railroad (UPRR) (i.e., the Hirschdale Road Overhead), were planned for removal. After evaluation of project alternatives, which included the preparation of preliminary design plans, environmental studies and public comment, the County determined that the best project would be to replace the Truckee River Bridge and rehabilitate the Hirschdale Road Overhead, to retain and provide the necessary access to lands along Hirschdale Road and Hinton Road, north and east of the UPRR, and support the future Tahoe-Pyramid Bike Trail.

Build Alternative

Truckee River Bridge on Hirschdale Road - The proposed project will remove the existing bridge, including foundations. It is anticipated that access will be maintained during most of construction via a temporary 40-foot-wide trestle installed across the Truckee River for use by the public as well as the contractor. New abutments will be constructed approximately 20 feet farther away from the river on each side. The new pier will consist of a single column supported on driven steel piles or micro-piles with a pile cap. Any pile driving activities will be conducted in isolation of the active river. A diversion structure (bladder dam, visqueen lined sandbags or k-rail, etc.) will be used adjacent to the new pier to keep pile driving activities (including noise and vibrations) separate from the active river. Seat type abutments at each end of the bridge will be supported on driven steel piles or micro piles. The new bridge superstructure will be a 2-span cast-in-place concrete box girder or precast concrete girders with cast-in-place concrete deck. The new bridge will be 283 feet long and 26 feet wide. The bridge will provide 16 feet between barrier and curb with a 6-foot wide sidewalk and up to a 2-foot-wide barrier on each side. A fiber optic line attached to the existing bridge will have to be temporarily relocated and then reset on the new bridge spans. Construction will include 150 feet of approach on either side of the bridge and will include necessary guard railing. The river restriction caused by the existing Abutment 6 will be removed and the area will be restored.

Hirschdale Road Overhead – The proposed project will rehabilitate and seismically retrofit the existing overhead structure. The rehabilitated bridge width will be 19 feet, including 15 feet between barrier faces with up to a 2-foot barrier on each side. The rehabilitation will include the following activities:

- Construct in-fill walls at the piers with the face of the infill in line with the pier face
- Remove loose concrete and place patches on the piers and abutments
- Construct pier cap concrete bolster, with shear key and restrainer cables
- Remove bridge barrier, overhang and spalling corbel brackets at joints
- Construct new barriers, approach guard rails and fencing (over tracks) on the overhead
- Remove Asphalt Concrete (AC) overlay on bridge deck and repair spalls
- Place polyester concrete overlay on bridge deck
- Replace all expansion joint seals
- Install inside guard rails on the existing railroad ties (done by UPRR)

Coordination with UPRR will include a GO-88B for processing the crossing changes though the Public Utilities Commission and a Construction and Maintenance (C&M) Agreement to address flagging, work performed by the railroad, work restrictions and a temporary construction easement.

The temporary access needs at each bridge fall within private right-of-way. It is anticipated that the project will require right-of-way to be acquired for the construction of the proposed bridge replacement and rehabilitation (Figure 3. Project Features).

The project is tentatively scheduled for construction in 2021 and is anticipated to require approximately 12 to 18 months to complete. Construction costs are estimated at a total of approximately \$4.5 million.

No-Build Alternative

Under the No-Build Alternative, the structurally deficient spans of the Truckee River Bridge on Hirschdale Road would not be replaced and major deterioration in the substructure and superstructures of the Hirschdale Road Overhead would not be rehabilitated. Safety of both bridges would not be improved, and the bridges would remain structurally deficient. As well, the No-Build Alternative would

not extend the useful life of the bridges and would inhibit public access and use of this section of Hirschdale Road and the Truckee River.

Surrounding Land Uses and Setting: The proposed project is located in the rural eastern portion of Nevada County surrounded by mostly undeveloped private land and forestry land. The small community of Hirschdale is located approximately 0.05 mile west of the project site.

Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board, California Department of Transportation, Federal Highway Administration; U.S. Fish and Wildlife Service; California Public Utilities Commission and, Union Pacific Railroad.

Figure 1. Project Vicinity

Figure 2. Project Location

Figure 3. Project Features

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Hirschdale Road Bridges Project - 2019

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

□ Aesthetics

- Agricultural Resources
- Cultural Resources
 - Hydrology/Water Quality
 - Noise
- Mineral ResourcesPublic Services

Materials

Biological Resources

Hazards & Hazardous

- RecreationMandatory Fin
- Utilities/Service Systems
- Mandatory Findings of Significance
- Air Quality
- Geology/Soils
- Greenhouse Gas Emissions
- □ Land Use/Planning
- □ Population/Housing
- Transportation/Traffic
- Tribal Cultural Resources
- 9. Determination. (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- □ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the 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.
- □ 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.

Patrick Perkins, P.E. Project Manager & Acting Principal Civil Engineer

Date

DOKKEN ENGINEERING INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION 2019 HIRSCHDALE ROAD BRIDGES PROJECT

Summary of Recommended Mitigation Measures

The proposed project is subject to a variety of regulations and standards that act to reduce its potential environmental impacts. The measures taken in response to these requirements are referred to as best management practices (BMPs) and typically are applied to effects of a short-term, temporary nature that occur during construction. The impact discussion of the individual resource topics that follows in the Initial Study discusses these measures and considers these BMPs when determining the potential significance of the project's effects (i.e., the impact determination *prior* to consideration of mitigation measures). For resource topics or issues where there are no applicable regulatory or standard construction BMPs, or where such BMPs alone are not sufficient to reduce a potential environmental impact to a less than significant level, mitigation measures are identified that are recommended to reduce the identified impact on the resource to a less than significant level.

Summary of Applicable BMPs:

Ground disturbing activities during the construction phase have the potential to result in soil erosion. A Stormwater Pollution Prevention Plan (SWPPP) identifying BMPs for erosion control would be prepared and implemented for the proposed project. Examples of BMPs for erosion control that would be implemented for the proposed project could include, but are not limited to:

- 1. **Preservation of Existing Vegetation** Preservation of existing vegetation involves the identification and protection of desired vegetation;
- 2. **Hydraulic Mulch** Hydraulic mulch is a mixture of shredded wood fiber or hydraulic matrix, water, and a stabilizing emulsion or tackifier. Applied hydraulic mulch will help protect bare soil from water and wind erosion. Bonded Fiber Matrix (BFM) is another soil stabilizer alternative to hydraulic mulch;
- 3. **Hydroseeding** Hydroseeding typically consists of applying a mixture of fiber, seed, fertilizer, and stabilizing emulsion with hydro-mulch equipment to temporarily protect exposed soils from erosion by water and wind;
- 4. **Soil Binders** Soil binders are materials applied to the soil surface to temporarily reduce erosion of exposed soils on construction sites. Soil binders consist of applying and maintaining polymeric or lignin sulfonate soil stabilizers or emulsions;
- 5. Straw Mulch Straw mulch consists of placing a uniform layer of straw and incorporating it into the soil with a studded roller or anchoring it with a tackifier. Straw mulch is used as a temporary surface cover for soil stabilization on Disturbed Soil Areas (DSAs) until soils can be prepared for re-vegetation. It is also used in combination with temporary and/or permanent seeding strategies to enhance plant establishment;
- 6. **Silt Fence** Silt fence is a temporary linear barrier that captures sediment by ponding and filtering storm water runoff to allow sediment to settle out of the runoff water; and/or,
- 7. **Fiber Rolls** A fiber roll consists of straw, flax, or similar material that is rolled and bound into a tight tubular cylinder and placed at regular intervals on a slope face. Fiber rolls intercept runoff, reduce runoff flow velocity, and release the runoff as sheet flow. Fiber rolls are used as a filter to rehabilitate sediment from runoff.

Summary of Recommended Mitigation Measures

III. AIR QUALITY: To reduce potentially significant construction-related effects on air quality conditions in the project area the following mitigation measures would be implemented:

Mitigation Measure AIR-1:

To help assure compliance by project contractors, conditions shall be included in the General Notes and/or the Grading Plan for the project, under a descriptive heading such as "Dust Control".

- a. The County and contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- b. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage.
- c. All unpaved areas with vehicle traffic shall be watered or have dust palliative applied as necessary for regular stabilization of dust emissions.
- d. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour (mph) on unpaved roads.
- e. All land clearing, grading, earth moving, or excavation activities on a project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- f. All inactive portions of the project site shall be covered, seeded with a sterile or native seed mix, or watered until a suitable cover is established. Alternatively, the County may apply County-approved non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the local grading ordinance.
- g. All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance, and there must be a minimum of six (6) inches of freeboard in the bed of the transport vehicle.
- h. Paved streets adjacent to the project shall be swept or washed at the end of each day, or more frequently if necessary, to remove excessive or visibly raised accumulations of dirt and/or mud which may have resulted from activities at the project site.

Mitigation Measure AIR-2:

To minimize air quality impacts from clearing activities and construction traffic emissions during all construction phases of the project, the following mitigation measures shall be included on all improvement plans and implemented throughout construction activities:

- a. Open burning of vegetative material shall be prohibited. Suitable alternatives include chipping, mulching, or conversion to biomass fuel.
- b. Temporary traffic control shall be provided during all phases of construction to improve traffic flow, as deemed appropriate by the County to improve traffic flow.

- c. The construction contractor shall meet the Northern Sierra Air Quality Management District and California Air Resources Board requirements for reduction of construction-related emissions by ensuring that the following is done either prior to or during construction of the proposed project:
 - i. The construction contractor shall properly and routinely maintain all construction equipment, as recommended by the manufacturers' manuals, to control exhaust emissions;
 - ii. The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with construction equipment idling; and,
 - iii. The construction contractor shall limit the hours of operation of heavy duty equipment and/or the amount of equipment in use simultaneously.
- **IV. BIOLOGICAL RESOURCES:** To avoid and minimize potential significant impacts on biological resources in the project area the following mitigation measures would be implemented:

Mitigation Measure BIO-1:

- a. All montane riparian habitat and other vegetation that is to be removed within the proposed work area should be removed during the non-nesting season, between September 16 and February 28.
- b. If vegetation removal is to take place during the nesting season (March 1st –September 15th), a pre-construction nesting bird survey must be conducted within 7 days prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the project biologist will be removed by the contractor.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until the project biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

c. If construction on the existing bridge is planned to occur during the swallow nesting season, measures will be taken to avoid impacts to migratory swallows. To protect migratory swallows, unoccupied nests must be removed from the existing bridge structure prior to the nesting season (February 15th – September 15th). During the nesting season, the bridge structure must be maintained through the active removal of partially constructed nests, or through the use of exclusionary devices. Swallows can complete nest construction in approximately 3 days. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged and the nest is no longer being used.

Mitigation Measure BIO-2:

a. Work in the live channel of the Truckee River will be limited to the period of June 15 through October 15. If any work within the live channel of the Truckee River is not completed by October 15, a written approval/extension must be obtained from the Service to allow work past October 15. Revegetation activities are excluded from this requirement with the stipulation that no heavy equipment be used in the channel.

- b. Prior to the replacement of the Truckee River Bridge, a Service-approved biologist will instruct all construction personnel and monitoring biologists of the terms and conditions being implemented to protect Lahontan cutthroat trout during construction. The biological monitor will have the full authority to halt work as necessary for the purpose of minimizing the potential for adverse effects to Lahontan cutthroat trout.
- c. The name and credentials of a biologist qualified to act as a biologist/construction monitor shall be submitted to the Service for approval at least 15 days prior to the commencement of work.
- d. During demolition of the existing Truckee River Bridge, a temporary protective structure (e.g. tarp or equivalent) will be used during saw-cutting or chipping operations, while the superstructure is being prepared for removal in sections, to catch dust, slurry or chunks of concrete before it enters the Truckee River.
- e. Environmentally Sensitive Areas (ESA's) will be designated at the edge of work adjacent to the Truckee River to prevent encroachment into the live channel and adjacent wetland and riparian areas (excluding activities associated with the construction of the temporary approach roadway beyond each end of the temporary bridge and pier excavation activities). ESA limits will be marked using orange snow fencing or equivalent, and will remain in place and maintained in good condition until construction is complete.
- f. No construction material or debris will be allowed to enter surface waters or their channels. Best Management Practices for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.
- g. Following construction, all graded or otherwise bare slopes will be revegetated with native seed mix.
- h. All work will be conducted during daylight hours.

Mitigation Measure BIO-3:

- a. BMPs will be incorporated into project design and project management to minimize impacts on the environment including the release of pollutants (oils, fuels, etc.):
 - i. The area of construction and disturbance shall be limited to as small an area as feasible to reduce erosion and sedimentation.
 - ii. Measures shall be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams.
 - iii. Existing vegetation shall be protected where feasible to reduce erosion and sedimentation. Vegetation shall be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
 - iv. Exposed soils shall be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.

- v. Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the project site caused by wind and construction activities such as traffic and grading activities.
- vi. All construction roadway areas shall be properly protected to prevent excess erosion, sedimentation, and water pollution.
- vii. All vehicle and equipment maintenance procedures shall be conducted off-site. In the event of an emergency, maintenance would occur away from the Truckee River.
- viii. All concrete curing activities shall be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- ix. All construction materials, vehicles, stockpiles, and staging areas shall be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.
- x. Energy dissipaters and erosion control pads shall be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented.
- xi. All erosion control measures and storm water control measures shall be properly maintained until the site has returned to a pre-construction state.
- xii. All disturbed areas shall be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.
- xiii.Following seeding, jute netting or erosion control blankets shall be placed and secured over the slopes steeper than 2:1, horizontal:vertical (H:V).

xiv. All construction materials shall be hauled off-site after completion of construction.

- b. Measures consistent with the current Caltrans' Construction Best Management Practices Manual (including the SWPPP and WPCP Manuals [http://www.dot.ca.gov/hq/construc/stormwater/CSBMPM_303_Final.pdf]) shall be implemented to minimize erosion, siltation, and other water quality impacts during construction.
- c. Prior to issuance of a grading permit or other authorization to proceed with project construction, the project proponent shall obtain any regulatory permits that are required from the Army Corps of Engineers, Regional Water Quality Control Board, and /or CDFW.

Mitigation Measure BIO-4:

Impacts on any wetland permanently or temporarily affected by the proposed project shall be offset through the dedication of mitigation credit(s) within a U.S. Army Corps of Engineers-approved mitigation bank or through the payment of in-lieu fees to an approved conservation bank. No net loss of wetlands shall occur.

Mitigation Measure BIO-5:

- a. Bridge construction activities shall occur only after any bats roosting in the vertical cavities have been humanely evicted (Truckee River Bridge and Hinton Overhead).
 - i. To avoid impacts to non-volant pups or torpid adult bats, eviction shall occur between March 1 April 15 (assuming no rain or snow), and August 31 October 15.
 - ii. A qualified bat biologist possessing a Memorandum of Understanding with the California Department of Fish and Wildlife and experienced with humane bat eviction and exclusion shall survey the Truckee River and Hirschdale Road Overhead bridges for potential roosting habitat prior to exclusion procedures. Any potential roosting sites not exhibiting signs of inhabitation will then be sealed with suitable material (expanding foam, backer rod, mesh, etc.) to prevent their use by bats when exclusion procedures occur.

The qualified bat biologist will then, either supervise the installation of, or install one-way exits at the roost cavity openings within the Hirschdale Road Overhead. These will be installed at least 14 days prior to bridge construction activities and shall remain in place 10-14 days, followed by a survey to determine effectiveness. If all bats have been safely evicted, the crevices will be sealed with suitable materials sufficient to remain until bridge construction activities are complete.

- iii. Bridge construction activities may begin any time after bats have been successfully humanely evicted; however, if bridge construction activities will not occur until after 180 days after eviction, a biologist shall conduct an inspection of the blockage materials to ensure they have remained effective. If materials have not remained in the roost crevices, surveys and/or eviction may need to be repeated as determined by the biologist.
- b. Until all day-roosting bats have been excluded, bird exclusion netting will not be installed on or in proximity to the bridge structures. All bird exclusion netting must be maintained in good working order to prevent the entrapment of bats.
- V. CULTURAL RESOURCES: To minimize potentially significant effects on cultural resources during construction the following mitigation measures would be implemented:

Mitigation Measure CULT-1:

The Environmentally Sensitive Area (ESA) / Secretary of the Interior's Standards for the Treatment of Historic Places (SOIS) Action Plan (Appendix E) shall be implemented prior to project ground disturbing activity and shall continue throughout the entirety of the proposed project until completion. This plan establishes protocol for designation of an ESA with exclusionary fencing and soil stabilization along the existing dirt access roads, to protect the Clinton Townsite from project impacts. It also includes appropriate pre-construction, during construction, and postconstruction protocol for ESA fencing establishment, maintenance, monitoring, and removal as well as detail of the appropriate action steps needed in case of ESA breaching.

Mitigation Measure CULT-2:

If deposits of prehistoric or historical archaeological materials are encountered during project activities, then all work within 200 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make

recommendations regarding the treatment of the discovery. The County should also be notified. Project personnel/construction workers should not collect or move any archaeological materials or human remains and associated materials. If such deposits cannot be avoided, they should be evaluated for their California Register of Historical Resources eligibility. If the deposit is not eligible, a determination shall be made as to whether it qualifies as a "unique archaeological resource" under CEQA. If the deposit is neither a historical nor a unique archaeological resource, avoidance is not necessary. If the deposit is eligible to the California Register, or is a unique archaeological resource, it shall need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, recording the resource; recovery and analysis of archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Mitigation Measure CULT-3:

If paleontological resources are discovered during project activities, all work within 200 feet of the discovery shall be redirected and a qualified paleontologist contacted to assess the finds, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Project personnel/construction workers shall not collect or move any paleontological resources. If the paleontological resources cannot be avoided, they shall be assessed to determine their paleontological significance. If the paleontological resources are not significant, avoidance is not necessary. If the paleontological resources are significant, adverse effects shall be mitigated through data recovery by the qualified paleontological consultant. Upon completion of the assessment, the paleontologist shall prepare a report documenting the methods and results, and provide recommendations for the potential for additional finds.

Mitigation Measure CULT-4:

If human remains are encountered during project activities, the project shall comply with the requirements of HSC §7050. There shall be no further excavation or disturbance of the site or within 200 feet of the area reasonably suspected to overlie adjacent remains until the coroner of Nevada County has determined the manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission shall identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated artifacts.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report should be submitted to the Nevada County Department of Public Works.

VIII. HAZARDS AND HAZARDOUS MATERIALS: To address potentially significant effects on the environment related to Hazards and Hazardous Materials the following mitigation measures would be implemented:

Mitigation Measure HAZ-1:

The County will provide the Phase II Sampling and Analysis for the Hirschdale Road Bridges to the contractor. Pursuant to California Code of Regulations (CCR) Title 8, Section 1532.1, the contractor performing the work is required to prepare a lead compliance plan and perform lead awareness training. The project special provisions will address these requirements, as set forth by the Division of Environmental Analysis guidance for special provisions related to earth material containing lead at concentrations that are non-hazardous according to Caltrans special provisions.

Mitigation Measure HAZ-2:

Soil at locations HBTR-SS-7A, HBHO-SS-2A, and HBHO-SS-6A shall be covered with one foot of clean soil or with pavement, or alternately the upper six inches of soil shall be excavated, stockpiled, placed as fill, and covered with at least one foot of clean soil or with pavement. The soil shall not be stockpiled or buried outside of the project construction corridor, and soil excavated from these areas shall be placed above the ordinary high water mark of the Truckee River.

Mitigation Measure HAZ-3:

During all handling of ADL-contaminated soil (including excavation, loading and unloading from vehicles, and all handling related to stockpiling and burial), fugitive dust control measures are required (using water or other palliatives) pursuant to Caltrans regulations and the regulations of the local air quality management district. If visible dust migration beyond the project limits occurs during any activity associated with ADL-contaminated soil, then the activity should be stopped until remedial actions are taken or other conditions change that enable resumption of the activity without dust migration.

Mitigation Measure HAZ-4:

The contractor will contact the California Division of Occupational Safety and Health (Cal/OSHA) if more than 100 square feet of paint on bridge guardrails will be disturbed, and the contract will address the provisions set forth by the Division of Environmental Analysis guidance for special provisions related to disturbance of existing paint systems on bridges, according to Caltrans special provisions.

Mitigation Measure HAZ-5:

The contractor shall prepare spill and leak prevention procedures prior to the commencement of construction activities. The procedures shall include information on the nature of all hazardous materials that shall be used on-site. The procedures shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided.

VIIII. HYDROLOGY / WATER QUALITY: To offset the potential for impacts related to alteration of drainage features and storm water quality from operational activities, Mitigation Measure BIO-2, BIO-3, and the following avoidance and minimization measures will be required:

Mitigation Measure WQ-1:

Any requirements for additional avoidance and minimization measures will be contained in the permits obtained from all required regulatory agencies.

Mitigation Measure WQ-2:

The proposed project requires a National Pollutant Discharge Elimination System (NPDES) General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2012-0006-DWQ).

Mitigation Measure WQ-3:

The construction contractor will adhere to the State Water Resources Control Board (SWRCB) NPDES Permit pursuant to Section 402 of the CWA. This permit authorizes storm water and authorized non-storm water discharges from construction activities. All applicable BMPs will be followed to ensure that adequate measures are taken during construction to minimize impacts to water quality.

Mitigation Measure WQ-4:

The construction contractor will adhere to the State Water Quality Certification Permit pursuant to Section 401 of the CWA. This permit regulates discharges of fill and dredged material to all waters of the state, including waters of the U.S. under CWA section 401 and the Porter-Cologne Water Quality Control Act. All applicable measures within the approved permit will be applied to the final project specifications.

Mitigation Measure WQ-5:

The construction contractor will adhere to the California Department of Fish and Wildlife Streambed Alteration Agreement Permit pursuant to Section 1602 of the Fish and Game Code. This permit authorizes any activity that would result in the modification of the bed, bank, or channel of a stream, river, or lake, including water diversion and damming and removal of vegetation from the floodplain to the landward extent of the riparian zone. All applicable measures within the approved permit will be applied to the final project specifications.

Mitigation Measure WQ-6:

Permanent treatment control BMPs will be evaluated based on effectiveness and feasibility and incorporated into the final design as applicable.

Mitigation Measure WQ-7:

Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources.

XII. NOISE: To address potentially significant effects from construction-related noise on nearby sensitive receptors, the Nevada County Department of Public Works will ensure the Construction Contractor implement the following mitigation measure:

Mitigation Measure NOISE-1:

- a. The Contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.
- b. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler.

- c. Where feasible, the project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors within the community of Hirschdale near the project site.
- d. The construction contractor shall locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project and construction activities.
- e. To avoid sleep disturbance of noise sensitive receptors, all noise producing construction activities within 1,000 feet of residential land uses, including warming-up or servicing equipment or trucks and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 6:00 p.m. on Saturdays and Sundays. No construction shall be permitted on official national holidays, except as otherwise authorized by the Engineer.
- f. As directed by the County, the Contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, and notifying adjacent residents in advance of construction work.
- **XVI. TRANSPORTATION/TRAFFIC:** To minimize potentially significant construction-related transportation and circulation hazards in the project vicinity the following mitigation measure would be:

Mitigation Measure TRAF-1:

To minimize temporary impacts to residents during construction, with the exception of activities necessary to replace the Truckee River Bridge and rehabilitate the Hirschdale Road Overhead, construction staging areas and construction traffic shall avoid the community of Hirschdale to the extent possible by establishing primary staging areas east of the Truckee River Bridge.

XVII. TRIBAL CULTURAL RESOURCES: To minimize potentially significant construction-related tribal cultural resources hazards in the project vicinity the following mitigation measure would be:

Mitigation Measure TCR-1:

In the event that Tribal Cultural Resources (TCRs) are inadvertently discovered during the course of constructing this project, work shall be halted in that area. The County of Nevada shall immediately contact a qualified archaeologist and the Washoe Tribe of Nevada and California to assess the significance of the discovery. Should it be determined that the Native American cultural resource is an eligible TCRs, the County shall determine appropriate mitigation in consultation with the Washoe Tribe of Nevada and California. Construction activities shall not resume until mitigation measures have been completed. Further, the County shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to TCRs.

2.0 ENVIRONMENTAL EVALUATION

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	AESTHETICS		•		
Would	the project:				
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?				•

Environmental Setting

The proposed project is located in a rural part of Nevada County adjacent to the community of Hirschdale and 6 miles northeast of the Town of Truckee. The project area includes a rural residential community (to the south of I-80), and dominant habitat of bitterbrush scrubland.

a) Have a substantial adverse effect on a scenic vista?

The proposed project is located in an area used for rural residential (to the west) and a quarry (to the north), and is not located within a County or State designated scenic vista; therefore, there would be no impact to a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Hirschdale Road is not part of the California Scenic Highway system. The project is located outside the boundary of a State Scenic Highway; therefore, the project would have no impact on scenic resources within a State Scenic Highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The project is located within a rural area of Nevada County. Hirschdale Road is not heavily traveled and the bridges are visible from only a few residences in the community of Hirschdale; therefore, the number of viewers (i.e., motorists and residents) with exposure or sensitivity to the change due to the Project would be minimal. Overall, the features proposed by the project would not degrade the existing visual character or quality of the area and may even improve some views by replacing the existing deteriorating Truckee River Bridge and rehabilitating the Hirschdale Road Overhead. Impacts on the existing visual character or quality of the site and its surroundings would be less than significant.

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d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project would not create a new source of light or glare. The proposed project would not have lighting elements incorporated into the design. Night construction work would not occur near the vicinity of any sensitive receptors (i.e., residences) as construction activities would be limited to 7:00 AM and 7:00 PM each day. The proposed project would not generate a new source of substantial light or glare, and would not adversely affect day or nighttime views in the area. No impacts would occur.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. AGRICULTURAL AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a nonagricultural 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?

Environmental Setting

The proposed project is located in an area with rural residential uses. There is no active farming or timber harvesting within or adjacent to the project area.

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 a non-agricultural use?

According to the maps available from the California Division of Land Resource Protection and the Nevada County website the proposed project would not be constructed on land that is prime, unique, or otherwise

important farmland. The proposed project would not require conversion of farmland to non-farm uses and therefore no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Land within the proposed project site is zoned as Residential Agricultural (RA-3), Open Space (OS), General Agricultural (AG-30), and Interim Development Reserve (IDR). The project consists of the replacement and rehabilitation of two existing bridges, and approach roadway improvements that would not conflict with existing zoning for agricultural use. The land within the project site is not subject to a Williamson Act contract. Therefore, the project would have no impact on, or conflict with, land zoned 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))?

The majority of the proposed improvements would be located within the existing roadway right-of-way (ROW). The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned as Timberland Production. There is no land zoned for forest land or timberland projection within the project area; therefore, the project would have no impact to forest land, timberland, or timberland zoned as Timberland Production

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The project would not cause loss of forest land or require conversion of forest land to non-forest use. The project is consistent with Nevada County General Plan and Land Zoning designations; therefore, the project would have no impact or result in conversion of any forest land.

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?

The project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. The project is consistent with Nevada County General Plan and Land Zoning designations; therefore, the project would have no impact to Farmland or forest land.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	AIR QUALITY		•		
Where a air qual upon to	available, the significance criteria established by the applicable ity management or air pollution control district may be relied make the following determinations. Would the project:				
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?				

Environmental Setting

Eastern Nevada County is within the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD), which regulates air quality for Nevada, Plumas, and Sierra Counties. Air quality conditions in the NSAQMD area have improved significantly since the NSAQMD was created in 1986. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen dramatically. Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Ozone levels, measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the NSAQMD and other regional, State and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the NSAQMD area still exceeds the State standard for 1-hour ozone.

Particulate matter is the primary pollutant of concern in the NSAQMD area. Inhalable particulate or PM10 (particulate matter 10 microns or less in diameter) and PM2.5 (particulate matter 2.5 microns or less in diameter) refers to a wide variety of solid or liquid particles in the atmosphere. These include smoke, dust, aerosols, and metallic oxides. Some of these particulates are considered toxic. Although particulates are found naturally in the air, most particulate matter found in the region are emitted either directly or indirectly by motor vehicles, industry, construction, wood burning, re-entrained road dust, and wind erosion of disturbed areas. Most PM2.5 is comprised of combustion products (i.e., soot). High levels of PM10 and PM2.5 can lead to adverse health effects, nuisance, concerns, and reduced visibility. The NSAQMD area is considered a nonattainment area for PM10, relative to the State standard, and unclassified for the federal

standards. Additionally, the NSAQMD is listed as a federal nonattainment area for PM2.5, and listed as unclassified as a state criteria pollutant area.

No exceedances of the State or federal Carbon Monoxide (CO) standards have been recorded at any of the region's monitoring stations since 1991. The NSAQMD area is currently considered a maintenance area for State and federal CO standards.

Most of Nevada County's ozone is transported by wind from the Sacramento and Bay Areas. Ozone is formed by volatile compounds (VOC or ROG) and oxides of nitrogen (NO_x) reacting in sunlight, especially in hot days. Ozone is an unstable 3-oxygen molecule that oxidizes substances it contacts. Nearly half of California's ozone is from car and truck exhaust. The rest is from power production, off-road equipment, industry, consumer products, vegetation, and other sources. As noted previously, the eastern portion of Nevada County, including the Town of Truckee, remains in non-attainment for the federal 8-hour Ozone Standard.

a) Conflict with or obstruct implementation of the applicable air quality plan?

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of State air quality standards. The Nevada County air quality status for 2015 is summarized in Table A.

Pollutant	Federal	State
Ozone (8 hour)	Nonattainment (Nevada County)	Nonattainment
Carbon Monoxide	Unclassified	Unclassified
Nitrogen Dioxide	Unclassified	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
PM ₁₀	Unclassified	Nonattainment
PM _{2.5}	Unclassified/Attainment	Unclassified

	Table A:	Air C) uality	Attainment	Status ((2015))
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Source: California Air Resource Board, 2016

The NSAQMD is not subject to a mandated clean air plan. Therefore, the project would not conflict with or obstruct implementation of a clean air plan. No impacts would occur.

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

The proposed project involves the replacement and rehabilitation of two existing bridges. Once operational, the project would not result in the generation of additional vehicle trips and is not expected to significantly increase regional vehicle miles traveled (VMT). However, excavation and earthwork associated with the proposed project would generate emissions associated with temporary grading and construction activities.

<u>Construction Impacts</u>: The project would require haul trucks for removal of certain materials. The construction period would occur from approximately May to November for a total of 26 weeks of construction. The Sacramento Metropolitan Air Quality Management District's Road Construction Emission Model, Version 6.3.2 (RoadMod) was used to estimate construction emissions related to the project. The emissions estimator RoadMod uses statewide emission factors for construction equipment and is therefore applicable for use on projects within the NSAQMD. Inputs to the model were based on assumptions discussed in the Project Description.

Table B presents estimated construction-related emissions that would be generated by the proposed project.

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Project Construction Phase	ROG	NOx	PM ₁₀
Unmitigated Construction Emission Estimates	4.0	19.27	3.10
NSAQMD Daily Thresholds	24.0	24.0	79.0
Exceed Threshold?	No	No	No

Table B: Project Construction Emissions in Pounds/Day

Source: LSA Associates, Inc. July 2013.

None of the construction emissions are anticipated to exceed NSAQMD thresholds. However, the effects of construction activities would include increased dust fall and locally elevated levels of particulate matter downwind of construction, which would be potentially significant if unmitigated. NSAQMD Rule 226: Dust Control requires the submittal of a Dust Control Plan to the District for approval prior to any surface disturbance, including clearing of vegetation. Implementation of Mitigation Measures AIR-1 and AIR-2 would require compliance with this Rule and would reduce particulate emissions:

Mitigation Measure AIR-1:

To help assure compliance by project contractors, conditions shall be included in the General Notes and/or the Grading Plan for the project, under a descriptive heading such as "Dust Control".

- a. The County and contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- b. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage.
- c. All unpaved areas with vehicle traffic shall be watered or have dust palliative applied as necessary for regular stabilization of dust emissions.
- d. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour (mph) on unpaved roads.
- e. All land clearing, grading, earth moving, or excavation activities on a project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- f. All inactive portions of the project site shall be covered, seeded with a sterile or native seed mix, or watered until a suitable cover is established. Alternatively, the County may apply County-approved non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the local grading ordinance.
- g. All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance, and there must be a minimum of six (6) inches of freeboard in the bed of the transport vehicle.
- h. Paved streets adjacent to the project shall be swept or washed at the end of each day, or more frequently if necessary, to remove excessive or visibly raised accumulations of dirt and/or mud which may have resulted from activities at the project site.

Mitigation Measure AIR-2:

To minimize air quality impacts from clearing activities and construction traffic emissions during all construction phases of the project, the following mitigation measures shall be included on all improvement plans and implemented throughout construction activities:

- a. Open burning of vegetative material shall be prohibited. Suitable alternatives include chipping, mulching, or conversion to biomass fuel.
- b. The construction contractor shall meet the Northern Sierra Air Quality Management District and California Air Resources Board requirements for reduction of construction-related emissions by ensuring that the following is done either prior to or during construction of the proposed project:
 - i. The construction contractor shall properly and routinely maintain all construction equipment, as recommended by the manufacturers' manuals, to control exhaust emissions;
 - ii. The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with construction equipment idling;
 - iii. The construction contractor shall limit the hours of operation of heavy duty equipment and/or the amount of equipment in use simultaneously.

Implementation of Mitigation Measures AIR-1 and AIR-2 would reduce project construction emissions to a less than significant level at both the project and cumulative level; therefore, project impacts would be less than significant with mitigation incorporated.

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)?

According to the California Air Resources Board, Nevada County is in nonattainment for criteria pollutants PM₁₀ (federal) and 8-hour ozone (federal and state) (see Table A). As discussed in section III the project is not anticipated to substantially increase criteria pollutants from construction or operational phases of the project; therefore, no impacts would occur for cumulative considerable net increases in criteria pollutants.

d) Expose sensitive receptors to substantial pollutant concentrations?

Given that the proposed project is located in a rural, largely undeveloped area, and that the extent of construction activities is relatively small, the proposed project would not expose sensitive receptors to noxious fumes or fugitive dust. As described in Section III.b above, the project would not generate significant amounts of air pollutants and the amount of dust generated during construction would be minimal and as described in Section III.b above. The project would not generate significant amounts of air pollutants and the amount of dust generated during construction would be minimal and short-term. In addition, implementation of Mitigation Measures AIR-1 and AIR-2 would further reduce any impacts. Therefore, emissions generated by the proposed project that affect air quality would have a less than significant impact with mitigation incorporated on sensitive receptors.

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

Objectionable odors may be generated from the operation of diesel-powered construction equipment during the project construction period. However, these odors would be short-term in nature and would not result in permanent impacts to surrounding land uses, including sensitive receptors in the vicinity of the project site. Implementation of the proposed project would not create objectionable odors affecting a substantial number of people or subject persons to objectionable odors. No impacts would occur.

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		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	BIOLOGICAL RESOURCES				
Would	the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife 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 Wildlife or U.S. Fish and Wildlife Service?	٦	•		
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 rehabilitation, 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?				•

Environmental Setting

LSA Associates, Inc. prepared a Natural Environment Study (NES) and Biological Assessment (BA) for the proposed project; dated February 2014 and October 2012, respectively. With the changes in scope and scale of the project specifications from removal of the Hirschdale Road bridges to replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead, Dokken Engineering has completed an NES Addendum (Dokken Engineering 2019a) and Caltrans has requested concurrence from USFWS. The following text summarizes the methods used and the setting of the project site. Results from the analysis, as documented in the NES and NES Addendum, were used to describe the project's impacts and mitigation measures.

The project area used for analysis consists of the project footprint (including cut/fill slopes, access and staging areas) and lands beyond the footprint that could potentially be affected by project construction and/or were determined necessary to inventory in order to perform an adequate analysis of project impacts (termed 'Biological Study Area' or BSA in the NES).

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A list of sensitive wildlife and plant species potentially occurring within the BSA was compiled to evaluate potential impacts resulting from project construction. Sources used to compile the list include the California Natural Diversity Data Base (CNDDB 2019), the California Native Plant Society Online Edition (CNPS 2019), and the U.S. Fish and Wildlife Service, Sacramento Field Office (USFWS 2019) referencing the Sardine Peak, Dog Valley, Hobart Mills, Boca, Truckee, and Martis Peak 7.5' United States Geological Survey quadrangles.

The BSA defined for the project comprises 15.35 acres of developed and natural landscape. Natural lands in the BSA include the Truckee River and the associated riparian corridor, and bitterbrush scrub upland vegetation. The area in which the BSA is located is mainly privately owned and undeveloped; disturbed/ruderal areas and developed areas consist primarily of existing roads and parking areas.

Vegetative communities/habitats occurring in the BSA are presented below in Table C: Vegetation Communities/Habitats in the BSA. These communities/habitats include bitterbrush series, montane riparian, riverine, disturbed/ruderal, and developed.

Figure 4. Vegetation Communities/Habitats shows the location of the vegetation communities/habitats that are listed above in Table C.

Vegetation Community/Habitat	Area (acres)		
Bitterbrush Series	8.03		
Montane Riparian	1.04		
Wetland	0.16		
Riverine	0.63		
Disturbed/Ruderal	0.64		
Developed	4.85		
Total	15.35		

Table C: Vegetation Communities/Habitats in the BSA (in acres)

Source: Dokken Engineering; NES Addendum (2019a)

Several special status plant and animal species are listed as potentially occurring in the project area. As described further in the NES and NES Addendum, a review was conducted of the specific habitats required by each species and the specific habitats and habitat conditions present in the BSA. Based on this evaluation, it was determined whether the species listed had potential to occur in the BSA based on the availability of suitable habitat or other factors.

Potential habitat for several special status plants is present in the BSA. However, these species were not identified during focused plant surveys in October 2011, July 2012, or November 2016. Consequently, these species are assumed absent from the BSA.

After evaluation of the special status wildlife species potentially occurring in the BSA, several special status wildlife species were determined to have a reasonable likelihood of occurring in the BSA and may be affected by the proposed project. These species include: Lahontan cutthroat trout (LCT) (*Oncorhynchus clarkia* hensawi), yellow warbler (*Dendroica petechia brewsteri*); willow flycatcher (*Empidonax traillii*); and bald eagle (*Haliaeetus leucocephalus*). Further discussion of the special status wildlife species is found in the 2014 NES and 2019 NES Addendum.

Caltrans submitted a Request for Amendment of the Informal Endangered Species Consultation for the Hirschdale Road Bridge Removal Project (File Number: 08ESMF00-2013-I-0191-1) regarding LCT on March 10, 2017. The Amendment re-initiated formal consultation and addressed the changes to the project

description, the 2017 BSA, potential impacts to LCT, and concurrence that the revised project would retain the 2013 finding of "may affect, not likely to adversely affect LCT". On July 31, 2017, USFWS concurred that the rehabilitation project may affect, but is not likely to adversely affect LCT. With subsequent project changes from rehabilitation to replacement of the Truckee River Bridge, Caltrans submitted an additional memorandum to USFWS, regarding the project updates stating, "It is our determination the new project has no additional potential to impact LCT or any other federally listed species and therefore the affect determination does not change."

A number of non-special status bat species were identified as roosting within the Hirschdale Road Overhead, structure, whereas no determination could be made for roosting within the Truckee River Bridge. Species were identified through visual and audio confirmation and include: big brown bat (*Eptesicus fuscus*); silver-haired bat (*Lasionycteris noctivagans*); little brown bat (*Myotis lucifigus*), long-legged myotis (*M. volans*), Yuma myotis (*M. yumanensis*), and Brazilian free-tailed bat (*Tadarida brasiliensis*). Additionally, swallow nests were identified on both bridges.

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?

After evaluation of the special status wildlife species potentially occurring in the BSA, the following wildlife species were determined to have a reasonable likelihood of occurring in the BSA and may be affected by implementation of the proposed project. Analysis for each of these species is presented below.

Yellow Warbler

The yellow warbler is a State species of special concern; it has no federal status. Yellow warblers typically nest in riparian habitats and prefer willows, cottonwoods, aspens, sycamores, and alders for both nesting and foraging, but would also nest in montane shrubbery.

The montane riparian habitat along the Truckee River provides suitable nesting habitat for yellow warbler. The closest CNDDB record for yellow warbler is approximately 9 miles to the west near Donner Lake; however, the species has been identified as recently as 2018 within riparian habitat within the project area (ebird.org 2019). This species was not observed in the BSA during any of the surveys. Since potential nesting habitat is present in the BSA and this species is known from the local vicinity, there is a high potential for yellow warbler to occur in the BSA.

The replacement of the Truckee River Bridge on Hirschdale Road is anticipated to have approximately 0.04 acres of permanent impacts and approximately 0.48 acres of temporary impacts to montane riparian habitat due to the approach roadway of the temporary trestle, bridge replacement processes, and rock slope protection. This habitat could provide nesting habitat for yellow warbler (Figure 5. Impacts to Jurisdictional Waters). Implementation of the following mitigation measures would reduce project impacts to the yellow warbler to a less than significant level:
Figure 4. Vegetation Communities/Habitats

Figure 5. Impacts to Jurisdictional Waters

Mitigation Measure BIO-1:

- a. All montane riparian habitat and other vegetation that is to be removed within the proposed work area should be removed during the non-nesting season, between September 16 and February 28.
- b. If vegetation removal is to take place during the nesting season (March 1st –September 15th), a preconstruction nesting bird survey must be conducted within 7 days prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the project biologist will be removed by the contractor.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until the project biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

c. If construction on the existing bridge is planned to occur during the swallow nesting season, measures will be taken to avoid impacts to migratory swallows. To protect migratory swallows, unoccupied nests must be removed from the existing bridge structure prior to the nesting season (February 15th – September 15th). During the nesting season, the bridge structure must be maintained through the active removal of partially constructed nests, or through the use of exclusionary devices. Swallows can complete nest construction in approximately 2-3 days. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged and the nest is no longer being used.

With implementation of Mitigation Measure BIO-1 impacts to the yellow warbler would be less than significant with mitigation incorporated.

Willow Flycatcher

The willow flycatcher is a State endangered species; it has no federal status. Willow flycatchers inhabit low, dense thickets of willows along the edges of wet meadows, ponds, or other slow moving or still water sources above 2,000-foot elevation. Willow flycatchers require the dense thickets for foraging and nesting.

The montane riparian habitat along the Truckee River provides suitable foraging habitat for willow flycatcher but is not dense enough or extensive enough to provide suitable nesting habitat. In addition, this species does not typically nest along large, fast-flowing rivers. The closest CNDDB record for willow flycatcher is approximately 0.5 mile to the southeast along the Truckee River from 1992. There are no recent CNDDB records for this species along the Truckee River. This species was not observed in the BSA during any of the surveys. Since potential foraging habitat is present in the BSA and this species is known from the local vicinity, there is a moderate potential for willow flycatcher to occur in the BSA. However; the project is not anticipated to directly impact the species and no take of the species would occur. The replacement of the Truckee River Bridge on Hirschdale Road is anticipated to have approximately 0.04 acres of permanent impacts, and approximately 0.48 acres of temporary impacts to montane riparian habitat due to the approach roadway of the temporary trestle, bridge replacement processes, and rock slope protection. This habitat could provide foraging habitat for willow flycatcher (Figure 5. Impacts to Jurisdictional Waters). With implementation of Mitigation Measure BIO-1, identified above, impacts to the willow flycatcher would be further minimized and avoided. No impacts to willow flycatcher are anticipated.

Bald Eagle

The bald eagle is a State endangered species. This species was previously federally threatened, but has been delisted. Bald eagles forage in large bodies of water including oceans, lakes, and rivers. This species feeds primarily on fish but will also eat small mammals, waterfowl, seabirds, and carrion. Bald eagles build large stick nests in tall trees or on cliffs, usually within 1 mile of water.

No nesting habitat for bald eagle is present in the BSA but this species could potentially forage in the reach of the Truckee River in the BSA. The closest CNDDB record for bald eagle is approximately 4 miles to the north near the north shore of Boca Reservoir. This species was not observed in the BSA during any of the surveys. Since potential foraging habitat is present in the BSA and this species is known from the local vicinity, there is a moderate potential for bald eagle to occur in the BSA. However, the project is not anticipated to directly impact the species and no take of the species would occur. Temporary disturbance to potential foraging habitat may occur if any bald eagles attempted to forage in the reach of the Truckee River in the BSA during construction. With the implementation of Mitigation Measure BIO-1 and Mitigation Measure BIO-2, impacts to bald eagle would be further minimized and avoided. No impacts to bald eagle are anticipated.

Lahontan Cutthroat Trout (LCT)

The LCT is federally listed as threatened. Critical habitat has not been established for LCT. Historically, this species inhabited much of the cold water lakes, rivers, and streams in the Lahontan Basin of California and Nevada. In California, the current distribution is limited to one lake and three rivers in the Truckee River watershed. The primary reasons for the population decrease are habitat loss and introduction of non-native fish species.

The reach of the Truckee River within the BSA contains suitable habitat for LCT. Based on consultations with a representative from the USFWS, Reno Office and a representative from CDFW, there are no naturally occurring populations of LCT in the Truckee River, but artificial populations introduced as part of recovery activities receive the same protection as natural populations. LCT are considered seasonally present in the BSA. Potential impacts to LCT would include construction operations for the replacement of the Truckee River Bridge within the Truckee River. Impacts to LCT would be minimal and include temporary dewatering for the excavation of existing piers, temporary trestle foundations, and potential bridge falsework. Approximately 0.04 acres of temporary impacts to the Truckee River are anticipated (Figure 5. Impacts to Jurisdictional Waters). No permanent impacts to the LCT riverine habitat are anticipated; however, approximately <0.001 acres of associated wetland habitat is anticipated to be permanently impacted from the pier of the new replacement Truckee River Bridge. No direct impacts to the species are anticipated. Implementation of the following mitigation measure would reduce impacts to LCT to a less than significant level.

Mitigation Measure BIO-2:

- a. Work in the live channel of the Truckee River will be limited to the period of June 15 through October 15. If any work within the live channel of the Truckee River is not completed by October 15, a written approval/extension must be obtained from the Service to allow work past October 15. Revegetation activities are excluded from this requirement with the stipulation that no heavy equipment be used in the channel.
- b. Prior to the replacement of the Truckee River Bridge, a Service-approved biologist will instruct all construction personnel and monitoring biologists of the terms and conditions being implemented to protect Lahontan cutthroat trout during construction. The biological monitor will have the full

authority to halt work as necessary for the purpose of minimizing the potential for adverse effects to Lahontan cutthroat trout.

- c. The name and credentials of a biologist qualified to act as a biologist/construction monitor shall be submitted to the Service for approval at least 15 days prior to the commencement of work.
- d. During demolition of the existing Truckee River Bridge, a temporary protective structure (e.g. tarp or equivalent) will be used during saw-cutting or chipping operations, while the superstructure is being prepared for removal in sections, to catch dust, slurry or chunks of concrete before it enters the Truckee River.
- e. Environmentally Sensitive Areas (ESA's) will be designated at the edge of work adjacent to the Truckee River to prevent encroachment into the live channel and adjacent wetland and riparian areas (excluding activities associated with the construction of the temporary approach roadway beyond each end of the temporary bridge and pier excavation activities). ESA limits will be marked using orange snow fencing or equivalent, and will remain in place and maintained in good condition until construction is complete.
- f. No construction material or debris will be allowed to enter surface waters or their channels. Best Management Practices for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.
- g. Following construction, all graded or otherwise bare slopes will be revegetated with native seed mix.
- h. All work will be conducted during daylight hours.

With implementation of Mitigation Measure BIO-2 impacts to LCT would be less than significant with mitigation incorporated.

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?

Natural communities of special concern exist within the BSA of the proposed project. Implementation of the proposed project has the potential to impact montane riparian habitat and riverine habitat. Since these habitats occur within CDFW jurisdictional waters a Lake and Streambed Alteration Agreement from CDFW, under Section 1600 of the California Fish and Game Code would be required for project implementation as a standard regulatory permit. A discussion of the potential impacts on these natural communities is provided below.

Montane Riparian Habitat

This community occurs along the upper banks and benches of the Truckee River. In the BSA, this community is dominated by willow and pockets of mountain alder, with herbaceous groundcover of varying densities. Common herbaceous species include bluegrass, stinging nettle, common horsetail, mountain rose, Baltic rush, mugwort, sedge, and common spikerush. This plant community occupies 1.04 acres in the BSA. The project would result in approximately 0.48 acres of temporary impacts, and approximately 0.04 acres of permanent impacts to montane riparian habitat during the construction and use of the temporary trestle structure, approach roadway, rock slope protection, and pier of the new replacement Truckee River Bridge. With implementation of the Mitigation Measure BIO-3, impacts to montane riparian would be less than significant with mitigation incorporated.

Riverine

The riverine community within the BSA consists of the Truckee River; the reach of the Truckee River in the BSA is mostly unvegetated. Kentucky bluegrass and Baltic rush are the dominant species observed in this habitat within the BSA. Numerous herbaceous species, including yarrow, graceful cinquefoil, Western buttercup, mint, and thyme-leaved speedwell were also found in this community. This community occupies 0.63 acre in the BSA. The project is anticipated to have no permanent impacts to the Truckee River; however, temporary impacts to riverine habitat are anticipated. Construction activities are anticipated to require two seasons of in water work, within the designated work window of June 15 to October 15. It is anticipated that during the first season the contractor will demolish and remove the existing bridge, and the bridge replacement will be completed the following season. Temporary impacts within the river channel would consist of cofferdam installation and excavation of the existing bridge piers, temporary trestle foundations, temporary dewatering activities, and potential bridge falsework for the new replacement bridge. ESA fencing and avoidance and minimization measures will be implemented for protection of the riverine habitat and for work within the live channel. With implementation of the Mitigation Measure BIO-2 and BIO-3, impacts to the riverine community would be less than significant with mitigation incorporated.

Mitigation Measure BIO-3:

- a. BMPs will be incorporated into project design and project management to minimize impacts on the environment including the release of pollutants (oils, fuels, etc.):
 - i. The area of construction and disturbance shall be limited to as small an area as feasible to reduce erosion and sedimentation.
 - ii. Measures shall be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams.
 - iii. Existing vegetation shall be protected where feasible to reduce erosion and sedimentation. Vegetation shall be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
 - iv. Exposed soils shall be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
 - v. Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the project site caused by wind and construction activities such as traffic and grading activities.
 - vi. All construction roadway areas shall be properly protected to prevent excess erosion, sedimentation, and water pollution.
 - vii. All vehicle and equipment maintenance procedures shall be conducted off-site. In the event of an emergency, maintenance would occur away from the Truckee River.
 - viii.All concrete curing activities shall be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
 - ix. All construction materials, vehicles, stockpiles, and staging areas shall be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.

- x. Energy dissipaters and erosion control pads shall be provided at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures would also be implemented.
- xi. All erosion control measures and storm water control measures shall be properly maintained until the site has returned to a pre-construction state.
- xii. All disturbed areas shall be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.
- xiii.Following seeding, jute netting or erosion control blankets shall be placed and secured over the slopes steeper than 2:1, horizontal:vertical (H:V).

xiv. All construction materials shall be hauled off-site after completion of construction.

- b. Measures consistent with the current Caltrans' Construction Best Management Practices Manual (including the SWPPP and WPCP Manuals [http://www.dot.ca.gov/hq/construc/stormwater/CSBMPM_303_Final.pdf]) shall be implemented to minimize erosion, siltation, and other water quality impacts during construction.
- c. Prior to issuance of a grading permit or other authorization to proceed with project construction, the project proponent shall obtain any regulatory permits that are required from the Army Corps of Engineers, Regional Water Quality Control Board, and /or CDFW.

With implementation of the Mitigation Measure BIO-1, BIO-2 and BIO-3, impacts to riparian and other sensitive natural habitats would be less than significant with mitigation incorporated.

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 rehabilitation, filling, hydrological interruption, or other means?

After completing biological surveys on November 22, 2016, approximately 0.16 acres of wetland features were mapped within the project area. The project is anticipated to have approximately <0.001 acres of permanent impacts to wetland areas, from the placement of the new replacement bridge pier and approximately 0.05 acres of temporary impacts from dewatering and construction activities. (See Figure 5 Impacts to Jurisdictional Waters). Mitigation for the temporary impacts to wetlands is proposed at a ratio of 1:1; however, final mitigation efforts will be determined during the permitting phase of the proposed project, and any mitigation for permanent or temporary effects to wetlands will be provided through purchase of mitigation credit(s) or in-lieu fee(s) at an USACE-approved wetland mitigation bank. With implementation of Mitigation Measures BIO-2, BIO-3, and the following Mitigation Measure BIO-4, impacts to protected wetlands would be less than significant with mitigation incorporated.

Mitigation Measure BIO-4:

Impacts on any wetland permanently or temporarily affected by the proposed project shall be offset through the dedication of mitigation credit(s) within a U.S. Army Corps of Engineers-approved mitigation bank or through the payment of in-lieu fees to an approved conservation bank. No net loss of wetlands shall occur.

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?

The November 22, 2016 biological surveys noted the contiguous habitat of riverine and riparian areas traversing the project area were identified as consistent with the 2014 NES. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. The new project BSA and surrounding areas are mostly undeveloped and wildlife usage is mostly uninhibited. The community of Hirschdale and the railroad present some constraints, but it is likely wildlife moves through the BSA regularly. As the project is the replacement and rehabilitation of an existing facility, any effects to wildlife migrations associated with project construction would be temporary. Construction will be minimized at night, the likely peak in wildlife usage for migration purposes and at project completion, usage of the channel as a migration corridor would be restored. No impacts to wildlife corridors are anticipated.

Bat surveys conducted by Wildlife Research Associates, Inc. in July 2008 determined that the Hirschdale Road Overhead supported a day roost colony of approximately 400-500 bats, consisting of brown bat, little brown bat, Yuma myotis, long-legged myotis, and Brazilian free-tailed bat. At least three other bat species were observed audibly but could not be identified to species. It could not be confirmed if the roost was a maternity roost. The Truckee River Bridge may also support day roost habitat, but potential crevice habitat was difficult to observe due to the height of the bridge and the proximity to the river.

Qualified wildlife and bat biologist, Dr. Dave Johnston, completed a review of the July 2008 survey report and the proposed Hirschdale Road Overhead rehabilitation plans. Dr. Johnston's review determined that the Hirschdale Road Overhead rehabilitation will not permanently remove the existing bat habitat currently used by the roosting bat colony, and that project impacts from the rehabilitation, rather than the removal of the bridge, will only have temporary impacts to bat species during construction activities. Dr. Johnston confirmed that the project's preconstruction and exclusion measures were sufficient for the proposed project in order to avoid and minimize impacts to roosting bats. To avoid and minimize impacts to bat species inhabiting the bridges, bat exclusion minimization measures stated in the February 2014 NES will remain in place. However, due to changes in project size and scope, design and construction of artificial bat houses and monitoring efforts stated in the February 2014 NES will not be necessary. With the implementation of Mitigation Measure BIO-5, project impacts to native resident bat species would be less than significant with mitigation incorporated.

Additionally, during the biological surveys, swallows nests were identified on both the Truckee River Bridge and the Hirschdale Road Overhead. With the implementation of Mitigation Measure BIO-1, project impacts to native swallow species would be less than significant with mitigation incorporated.

Mitigation Measure BIO-5:

- a. Bridge construction activities shall occur only after any bats roosting in the vertical cavities have been humanely evicted (Truckee River Bridge and Hinton Overhead).
 - i. To avoid impacts to non-volant pups or torpid adult bats, eviction shall occur between March 1 April 15 (assuming no rain or snow), and August 31 October 15.
 - ii. A qualified bat biologist possessing a Memorandum of Understanding with the California Department of Fish and Wildlife and experienced with humane bat eviction and exclusion shall survey the Truckee River and Hirschdale Road Overhead bridges for potential roosting habitat prior to exclusion procedures. Any potential roosting sites not exhibiting signs of inhabitation will then be sealed with suitable material (expanding foam, backer rod, mesh, etc.) to prevent their use by bats when exclusion procedures occur.

The qualified bat biologist will then, either supervise the installation of, or install one-way exits at the roost cavity openings within the Hirschdale Road Overhead. These will be

installed at least 14 days prior to bridge construction activities and shall remain in place 10-14 days, followed by a survey to determine effectiveness. If all bats have been safely evicted, the crevices will be sealed with suitable materials sufficient to remain until bridge construction activities are complete.

- iii. Bridge construction activities may begin any time after bats have been successfully humanely evicted, however if bridge construction activities will not occur until after 180 days after eviction, a biologist shall conduct an inspection of the blockage materials to ensure they have remained effective. If materials have not remained in the roost crevices, surveys and/or eviction may need to be repeated as determined by the biologist.
- b. Until all day roosting bats have been excluded, bird exclusion netting will not be installed on or in proximity to the bridge structures. All bird exclusion netting must be maintained in good working order to prevent the entrapment of bats.

With implementation of Mitigation Measure BIO-5, and BIO-1, impacts to any established native wildlife species would be less than significant.

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

The Truckee River Bridge replacement would require construction activities to occur within the Truckee River channel. In accordance with Nevada County General Plan and Zoning Ordinance and Guidelines for Preparing Biological Reports (County Zoning Regulations, Sec. L-II 4.3.17), a Management Plan is required when a project will result in a new disturbance within 100 feet (non-disturbance buffer) of all wetland and riparian areas. The proposed project would trigger the requirement for preparation of a Management Plan due to work occurring in and within 100 feet of the Truckee River. The NES Addendum (Dokken Engineering 2019a) identifying mitigation measures BIO-1 through BIO-5 were prepared for the proposed project and would be used as the required management plan for any work that would occur within 100 feet of the Truckee River.

Implementation of the proposed project would not conflict with applicable ordinances, plans, or policies protecting biological resources. No impacts would occur.

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 site is not subject to any local, regional, or State habitat conservation plans. No impacts would occur with implementation of the proposed project.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

.7		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
v .	ULTUKAL RESOURCES				
Would	project:				
a)	use a substantial adverse change in the significance of a storical resource as defined in 15064.5?				•
b)	use a substantial adverse change in the significance of an chaeological resource pursuant to 15064.5?		•		
c)	rectly or indirectly destroy a unique paleontological source or site or unique geologic feature?		•		
d)	sturb any human remains, including those interred outside formal cemeteries?		•		
d)	sturb any human remains, including those interred outside formal cemeteries?		•		

Environmental Setting

Effective October 1, 2012, Caltrans and the FHWA entered into a Memorandum of Understanding (National Environmental Policy Act [NEPA] Assignment MOU) in which FHWA assigned and Caltrans assumed environmental review and consultation responsibilities under NEPA and Section 106 of the National Historic Preservation Act (NHPA) of 1966, pursuant to 23 U.S.C. 327, as amended by the Moving Ahead for Progress in the 21st Century Act (MAP-21) (October 1, 2012). Given that the undertaking is funded, in part, from the FHWA, it is subject to federal involvement and, as such, cultural resource studies are therefore mandated by the Advisory Council on Historic Preservation (ACHP) regulations 36 CFR Part 800 for implementing Section 106 of the NHPA. Compliance with Section 106 is being carried out in accordance with the First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the Army Corps of Engineers, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of Federal-Aid Highway Program in California (Caltrans Section 106 PA), executed January 1, 2014. In addition, the project is subject to state historic preservation laws and regulations set forth in the California Environmental Quality Act (CEQA) (PRC § 21000 et seq.). For all discussion relating to consultation with Native American Tribes under Assembly Bill 52 (AB 52) relating to Tribal Cultural Resources, please see Section 17 of this document.

The APE is established as the area of direct and indirect effects and consists of a 22.5 acre area. This includes all ground disturbance necessary for equipment and materials staging, construction access, vegetation/tree removal, temporary trestle bridge construction and removal, Truckee River Bridge (17C-0045) replacement, Hirschdale Road Overhead (17C-0046) bridge rehabilitation, installation of inside guard rails on the existing railroad rail line, temporary construction easements, and right-of-way acquisition. The APE is situated along Hirschdale Road, extending from Juniper Way on the west to Hinton Road on the east.

Cultural Resources within the APE

Cultural resource identification and evaluation efforts were previously conducted for this project between 2011 and 2014. At that time, the project was considerably larger in scope and consisted of bridge removal

and roadway improvements. A Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), Historical Resources Evaluation Report (HRER), Environmentally Sensitive Area (ESA) Action Plan, and a Supplemental HPSR were completed and approved. Since approval of these cultural reports, the project has been changed in scope for replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead. As a result, the APE was revised from 129.3 acres to approximately 22.5 acres and additional archaeological survey, Native American consultation efforts, and Extended Phase I (XPI) subsurface presence/absence testing efforts were required.

Efforts to identify potential archaeological resources in the Area of Potential Effects (APE) included background research, a search of site records and survey reports on file at the North Central Information Center (NCIC), efforts to coordinate with Native American representatives, pedestrian surface surveys, and XPI subsurface presence/absence testing. Based on these efforts, four cultural resources within the APE: Hirschdale Road Bridge (Bridge # 17C-0045), Hirschdale Road UPRR Overhead Bridge (Bridge # 17C-0046), a segment of the Central Pacific Transcontinental Railroad (CA-NEV-555/H), and the historic-era Clinton townsite (P-29-4366).

A pedestrian survey was first conducted within the APE on December 13, 2011 which confirmed the presence of the four previously recorded cultural resources. No additional cultural resources were identified. Subsequent to this initial survey, the project was reduced in scope which required redefinition of the APE and additional cultural resource identification and Native American consultation efforts. A new archaeological survey was conducted on November 22, 2016. The previous field conditions and survey results were verified. No additional cultural resources aside from the previously recorded cultural resources noted by NCIC were identified within the APE.

There is an unpaved roadway located within the boundaries of the Clinton Townsite which is currently utilized and maintained by the UPRR as an access road. As this road could also be utilized as an access road during construction of the Project, XPI subsurface presence/absence testing was conducted on August 6, 2018 to determine if there were any associated subsurface archaeological deposits associated with the Clinton Townsite within the unpaved roadway. The XPI testing found that there are no *in-situ* subsurface deposits within the unpaved roadway.

The four cultural resources within the APE are identified below in Table D.

				Historical Resource for
Resource Name and Number	Resource Type	In the Area of Direct Impact?	Proposed Project Activity at/near Resource	purposes of CEQA?
Resources evaluated in su	pport of the proposed p	roject		
Truckee River Bridge, No. 17C0045	historic-period bridge that caries Hinton Road over the Truckee River	Yes	Bridge replacement	No
Hirschdale Road Overhead, No. 17C0046	historic-period bridge that caries Hinton Road over the Union Pacific Railroad	Yes	Bridge rehabilitation	No
Clinton Townsite, P-29-4366	historic-period archaeological site	Yes	Roadway improvement and bridge rehabilitation	Yes

 Table D: Cultural Resources within the APE

				Historical
Resource Name and		In the Area of	Proposed Project Activity	Resource for
Number	Resource Type	Direct Impact?	at/near Resource	CEOA?
Central Pacific Railroad,	historic-period	Yes	Bridge rehabilitation	Yes
CA-NEV-555/H	railroad that is in- use			

Cultural Resource Descriptions and Evaluations

In order to be determined eligible for listing in the California Register of Historic Resources (CRHR), a property must be significant at the local, state, or national level under one or more of the following four criteria as defined in Public Resources Code 5024.1 and CEQA Guideline 15064.5(a).

- 1. It is associated with events or patterns that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.
- 2. It is associated with the lives of persons important to the nation or to California's past.
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a creative individual, or possesses high artistic values.
- 4. It has yielded, or may be likely to yield, information important to the prehistory or history of the state and the nation.

In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough on the historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling and association.

In support of the proposed project, two cultural resources were evaluated for inclusion in the NRHP/CRHR. These evaluations are provided below.

Truckee River Bridge (17C0045). This resource, a reinforced concrete T-beam bridge, carries Hirschdale Road over the Truckee River, near Hirschdale. The bridge is a component of the Lincoln Highway second-generation route. Although it was not part of the original transcontinental highway proposed in 1913, it was constructed in 1926 and adopted as part of the Lincoln Highway second-generation route. For their nation-wide survey, the National Park Service provides a period of significance for the Lincoln Highway that spans from 1913 to 1956 (National Park Service 2004:4). The potential period of significance for the Truckee River Bridge is from beginning of construction in 1926 to 1956, when the Federal Aid Highway Act passed and construction of I-80 commenced and ultimately bypassed the Lincoln Highway in this area.

Evaluation

The Lincoln Highway represents the emergence of the automobile as the predominant method of travel for Americans secondary to the railroad. This highway served as the foundation for the development of American car-culture, a national phenomenon that occurred during this period. Emphasis was placed on traveling on your own time in your own vehicle, reinforcing the American's sense of individuality and freedom. The Lincoln Highway also served as an example to other "named trail" associations during the Good Roads Movement. Although the Truckee River Bridge has potential significance under Criterion A of the NRHP and Criterion 1 of the CRHR for its association with an event that has made a significant contribution to the broad pattern of local or national history, it does not retain sufficient integrity to convey that significance. The integrity of the Truckee River Bridge is compromised by alterations to its original design, materials, workmanship, and feeling. The bridge's original decorative concrete railing was replaced by corrugated metal railing, a curb was replaced with modern concrete, and sheet metal was attached in 1953. Additionally, three inches of asphalt were applied to the surface of the bridge's deck in 1979. These alterations were not part of a significant development nor do they convey the historical significance of the Lincoln Highway. The repairs were simply current solutions to damage caused by multiple weathering events. Because these alterations significantly altered the bridge's integrity, this resource cannot convey its association with the nationwide pattern of local boosterism, local-state coordination, and roadway improvements that characterized the Good Roads Movement and the heyday of the Lincoln Highway. For this reason, the Truckee River Bridge does not appear eligible for listing on the NRHP or the CRHR under criterion A/1. Further, the bridge has no known association with important people and is not architecturally significant; therefore, it does not warrant consideration under criteria B/2 or C/3.

SHPO concurred on the recommendation of ineligibility on February 10, 2014.

Hirschdale Road Overhead (17C0046). This resource is a reinforced concrete T-beam bridge that carries Hirschdale Road over the UPRR, near Hirschdale. The bridge is a component of the Lincoln Highway second-generation route. Although it was not part of the original transcontinental highway proposed in 1913, it was constructed in support of the Lincoln Highway second-generation route in 1926. For their nation-wide survey, the National Park Service provides a period of significance for the Lincoln Highway that spans from 1913 to 1956 (National Park Service 2004:4). The potential period of significance for the Hirschdale Road Overhead is from beginning of construction in 1926 to 1956, when the Federal Aid Highway Act passed and construction of I-80 commenced and ultimately bypassed the Lincoln Highway in this area.

The Lincoln Highway represents the emergence of the automobile as the predominant method of travel for Americans secondary to the railroad. This highway served as the foundation for the development of American car-culture, a national phenomenon that occurred during this period. Emphasis was placed on traveling on your own time in your own vehicle, reinforcing the American's sense of individuality and freedom.

Evaluation

Although the Hirschdale Road Overhead has potential significance under Criterion A of the NRHP and Criterion 1 of the CRHR for its association with an event that has made a significant contribution to the broad pattern of local or national history, it does not retain sufficient integrity to convey that significance. The integrity of the Hirschdale Road Overhead is compromised by alterations to its original design, materials, workmanship, and feeling. The bridge's original decorative concrete railing was replaced by corrugated metal railing in 1953, and three inches of asphalt were applied to the surface of the bridge's deck in 1979. These alterations were not part of a significant development nor do they convey the historical significance of the Lincoln Highway. The repairs were simply current solutions to damage caused by multiple weathering events. Because these alterations significantly altered the bridge's integrity, this resource cannot convey its association with the nationwide pattern of local boosterism, local-state coordination, and roadway improvements that characterized the Good Roads Movement during the heyday of the Lincoln Highway. For this reason, the Hirschdale Road Overhead does not appear eligible for listing on the NRHP or the CRHR under criterion A/1. Further, the bridge has no known association with important people and is not architecturally significant; therefore, it does not warrant consideration under criteria B/2 or C/3.

SHPO concurred on the recommendation of ineligibility on February 10, 2014.

The two remaining resources, the historic-era Clinton Townsite and a segment of the Central Pacific Transcontinental Railroad, are being considered and treated as historical resources pursuant to the

discretionary authority provided to the lead agency by CEQA Guidelines §15064.5(a)(4). No additional resources were identified within the APE. Based on the analysis provided below, there are two historical resources and no archaeological resources within the APE which would be impacted by the project.

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

PRC §21084.1 states: "A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, a historical resource is a resource listed in, or determined to be eligible for listing in, the CRHR. Historical resources included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section."

There are two historical resources for purposes of CEQA within the APE; the Clinton Townsite and a segment of the Central Pacific Transcontinental Railroad.

The Clinton Townsite is being considered and treated as a historical resource pursuant to the discretionary authority provided to the lead agency by CEQA Guidelines § 15064.5(a)(4). Should project activity disturb or damage archaeological deposits associated with the Clinton Townsite, those qualities of the resource upon which its assumption of significance is based could be materially impaired, which could potentially result in a significant impact. Mitigation Measure CULT-1, described below, shall be implemented to reduce this potential impact to a less than significant level by protecting the Clinton Townsite from inadvertent construction-related impacts by excluding personnel and equipment from the resource. CULT-1 does allow the unpaved railroad access roads which traverse through the townsite to be utilized as an access road during construction of the Project as the XPI subsurface testing efforts found that there are no *in-situ* archaeological deposits within these roads. Further, Mitigation Measure CULT-2 will reduce potential project impacts to a less than significant level in the event that unanticipated cultural resources associated with the Clinton Townsite are discovered during construction. Therefore, with implementation of Mitigation Measure CULT-1 and CULT-2 the proposed project would not result in a substantial adverse change to the Clinton Townsite as defined in § 15064.5.

The project involves installing a parallel set of derailment protection rails within each of the double tracks of the UPRR and this work is consistent with the Secretary of the Interior's Standards for Rehabilitation (SOISR) #1, 2, 9, and 10 for the following reasons: The property shall continue to be used for its historic purpose as a railroad (SOISR 1); the historic character of the property shall be retained and preserved as the railroad corridor and double track will continue with minimal alterations (SOISR 2); the derailment protection rails shall not destroy any historic materials as the existing tracks contain modern materials (SOISR 9); and, the derailment protection rail installation shall be installed in such a manner that if removed in the future, the essential form and integrity of the historic property and environment – the double track and the overall railroad corridor - would be unimpaired (SOISR 10). As a result, the project would not significantly impact this historical resource.

Implementation of Mitigation Measures CULT-1 and CULT-2 would ensure that the proposed project would not cause a substantial adverse change in the significance of an historical resource pursuant to \$15064.5. Impacts would be less than significant with mitigation incorporated.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Under CEQA, the lead agency first determines if an archaeological site is a historical resource as defined in PRC §21084.1. If the site qualifies as a historical resource, potential impacts must be considered in the same manner as a historical resource. If the archaeological site does not qualify as a historical resource but *does* qualify as a unique archaeological site, then the archaeological site is treated in accordance with PRC §21083.2. In practice, most archaeological sites that meet the definition of a unique archaeological resource would first meet the definition of a historical resource and be treated accordingly. CEQA defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC §21083.2(g)).

One archaeological site was identified within the APE: the Clinton Townsite, P-29-4366.

As stated in the response to Question a) above, the Clinton Townsite is being considered and treated as a historical resource pursuant to the discretionary authority provided to the lead agency by CEQA Guidelines §15064.5(a)(4). Should project activity disturb or damage archaeological deposits associated with the Clinton Townsite, those qualities of the resource upon which its assumption of significance is based could be materially impaired, which could potentially result in a significant impact. Mitigation Measure CULT-1, described below, shall be implemented to reduce this potential impact to a less than significant level by protecting the Clinton Townsite from inadvertent construction-related impacts by excluding personnel and equipment from the resource. CULT-1 does allow the unpaved railroad access roads which traverse through the townsite to be utilized as an access road during construction of the Project as the XPI subsurface testing efforts found that there are no *in-situ* archaeological deposits within these roads. Further, Mitigation Measure CULT-2 will reduce potential project impacts to a less than significant level in the event that unanticipated cultural resources associated with the Clinton Townsite are discovered during construction. Therefore, with implementation of Mitigation Measure CULT-1 and CULT-2 the proposed project would not result in a substantial adverse change to the Clinton Townsite as defined in § 15064.5.

No unique archaeological resources (as defined in § 21083.1(g)) were identified within the APE. However, it cannot be definitively stated that no previously unidentified archaeological deposits that meet the definition of unique archaeological resources would be encountered during project activities. Should resources that so qualify be discovered and damaged during project activities, a substantial adverse change in their significance could occur, which could potentially result in a significant impact. Mitigation Measure CULT-2, described below, shall be implemented during project activity to reduce this potential impact to a less than significant level by identifying, assessing, and providing the requirement to offset damage to significant archaeological deposits through data recovery.

Mitigation Measure CULT-1:

The Environmentally Sensitive Area (ESA) / Secretary of the Interior's Standards for the Treatment of Historic Places (SOIS) Action Plan (Appendix E) shall be implemented prior to project ground

disturbing activity and shall continue throughout the entirety of the proposed project until completion. This plan establishes protocol for designation of an ESA with exclusionary fencing to protect the Clinton Townsite from project impacts. It also includes appropriate pre-construction, during construction, and post-construction protocol for ESA fencing establishment, maintenance, monitoring, and removal as well as detail of the appropriate action steps needed in case of ESA breaching.

Mitigation Measure CULT-2:

If deposits of prehistoric or historical archaeological materials are encountered during project activities, then all work within 200 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. The County should also be notified. Project personnel/construction workers should not collect or move any archaeological materials or human remains and associated materials. If such deposits cannot be avoided, they should be evaluated for their California Register of Historical Resources eligibility. If the deposit is not eligible, a determination shall be made as to whether it qualifies as a "unique archaeological resource" under CEQA. If the deposit is neither a historical nor a unique archaeological resource, it shall need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, recording the resource; recovery and analysis of archaeological deposits; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the Nevada County Department of Public Works.

Implementation of Mitigation Measures CULT-1 and CULT-2 would ensure that the proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5. Impacts would be less than significant with mitigation incorporated.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No paleontological resources are known to exist within the APE. However, it cannot be definitively stated that no previously unidentified paleontological resources would be encountered during project activities. According to the geologic map of the area (Saucedo, G. L. and Wagner, D. L. 1992. *Geologic Map of the Chico Quadrangle*. California Division of Mines and Geology. Scale 1:250,000) both bridges are mapped on Quaternary glacial deposits. These deposits have a low paleontological sensitivity. Should resources that so qualify be discovered during project activities, they could be destroyed by ground disturbance, which could potentially result in a significant impact. Mitigation Measure CULT-3, described below, shall be implemented during project activity to reduce this potential impact to a less than significant level by identifying, assessing, and providing the requirement to offset damage to paleontological resources through data recovery.

Mitigation Measure CULT-3:

If paleontological resources are discovered during project activities, all work within 200 feet of the discovery shall be redirected and a qualified paleontologist contacted to assess the finds, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Project personnel/construction workers shall not collect or move any paleontological resources. If the paleontological resources cannot be avoided, they shall be assessed to determine their paleontological

significance. If the paleontological resources are not significant, avoidance is not necessary. If the paleontological resources are significant, adverse effects shall be mitigated through data recovery by the qualified paleontological consultant. Upon completion of the assessment, the paleontologist shall prepare a report documenting the methods and results, and provide recommendations for the potential for additional finds.

Implementation of Mitigation Measure CULT-3 would ensure that the proposed Project would not directly or indirectly destroy a unique paleontological resource, site or unique geologic feature. Impacts would be less than significant with mitigation incorporated.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to exist within the APE. However, it cannot be definitively stated that no previously unidentified human remains would be encountered during project activities. Should human remains be discovered during project activities, they could be disturbed by project activity, which could potentially result in a significant impact. Mitigation Measure CULT-4, described below, shall be implemented during project activity to reduce this potential impact to a less than significant level through compliance with the provisions of Health and Safety Code (HSC) §7050.5, which would ensure the legally adequate and respectful treatment of descendants of modern communities.

Mitigation Measure CULT-4:

If human remains are encountered during project activities, the project shall comply with the requirements of HSC §7050. There shall be no further excavation or disturbance of the site or within 200 feet of the area reasonably suspected to overlie adjacent remains until the coroner of Nevada County has determined the manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission shall identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated artifacts.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report should be submitted to the Nevada County Department of Public Works.

Implementation of Mitigation Measure CULT-4 would ensure that construction activities associated with the proposed project would not disturb any human remains. Impacts would be less than significant with mitigation incorporated.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.	GEOLOGY AND SOILS		1		
Would	the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 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 waste water disposal systems where sewers are not available for the disposal of waste water?				•

Environmental Setting

Nevada County is part of the Sierra Nevada Range, a geologic block approximately 400 miles long and 80 miles wide that extends in a north-south band along the eastern portion of California. Two features of the Sierra Nevada range distinctly characterize the terrain of Nevada County. The western third of the County is comprised of rolling foothills that form a transition between the low-lying Sacramento valley and the mountains to the east. The eastern two-thirds of the County is comprised of the steep terrain and exposed granite of the Sierra Nevada range itself.

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 (DOC) website (DOC 2019), an unnamed fault within the Dog Valley Fault Zone approximately 4 miles northwest of the project site has had seismic activity as recently as 1966, and a Holocene fault (Polaris Fault) is approximately 4 mile west of the project site. However, the project site is not located within a defined Alquist-Priolo Earthquake Fault Zone, nor is it located on a known fault according to the DOC. Therefore, the proposed project activities would not expose people or structures to potential risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, and no impacts would occur.

ii) Strong seismic ground shaking?

Nevada County's historical earthquake activity is lower than the state average. According to the Nevada County General Plan, the County has experienced 26 earthquakes since 1887. Although the project site could be exposed to seismic ground shaking, the proposed replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead would be developed consistent with County and Caltrans Seismic Design Criteria. With the implementation of state-mandated Seismic Design Criteria no impacts would occur.

iii) Seismic-related ground failure, including liquefaction?

Soil liquefaction is a phenomenon primarily associated with the saturated soil layers located close to the ground surface. These soils lose strength during ground shaking. Due to the loss of strength, the soil acquires "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (minute silt and clay fraction) may also liquefy. According to the online Soil Survey of Nevada County, soils at the site are Kyburz-rock outcrop-Trojan complex (derived from lithic bedrock) underlying. As indicated in section *ii*, the project area is within proximity to a seismically active area, but is not itself located on any known faults. This soil is rocky and has a low potential for liquefaction; therefore, no impacts seismic related liquefaction of soils would occur.

iv) Landslides?

The topography of the proposed project site is in a relatively hilly area of the Sierra Nevada range. The site elevation ranges from approximately 5,600 feet above mean sea level (msl) at the eastern end to 5,450 msl in Hirschdale near the western end. The proposed project site is located on Tertiary volcanic flow rocks (igneous rock formations) according to mapping from the California Geologic Survey. The soils within and adjacent to the proposed project site are between 2 to 30 percent slopes. Typically lands with slopes of 30 percent or less are not prone to landslides. Furthermore, the Nevada County General Plan Safety Element does not designate the proposed project area as susceptible to landslides or in a high landslide activity area. The Safety Element concludes that a "low" risk landslide hazard rating is applicable to most areas of the County due to the presence of shallow igneous and metamorphic bedrock. The proposed project does not include the development of manufactured slopes as part of its design; and therefore, further investigation into the stability of such manufactured slopes would not be warranted. No impacts related to landslides would occur.

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

The project construction activities are anticipated to have site grading to modify the existing road alignment in the vicinity of the bridge approaches, including fill slope grading, fill placement, and compaction. Implementation mitigation measures BIO-2, and BIO-3, as well as BMPs identified in the SWPPP would reduce the potential for soil erosion during project construction activities; therefore, impacts would be less than significant with mitigation incorporated.

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?

The project will not 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. Refer to section a.*iii* and a.*iv*. No impacts from the project would occur.

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 have the tendency to expand and contract during alternative wetting and drying cycles and are generally associated with clay soils. Project site soils consist primarily Kyburz-rock outcrop-Trojan complex (derived from lithic bedrock) underlying which has little shrink-swell risk factor associated with it. The proposed project would not include the development of habitable structures on the project site. Potential soil expansion on the site would not create substantial risks to life or property. Site construction techniques would comply with County and Caltrans design standards to minimize risks associated with expansive soils. No impacts to expansive soils would occur

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

The proposed project would not generate wastewater requiring disposal. No septic tanks are proposed as part of the project. No impacts would occur.

VII.	GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Where a air qual upon to	available, the significance criteria established by the applicable ity management or air pollution control district may be relied make the following determinations. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			-	
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of				

Environmental Setting

greenhouse gases?

Greenhouse gases (GHGs) are those gases that trap heat in the atmosphere. GHGs are emitted by natural and industrial processes, and the accumulation of GHGs in the atmosphere regulates the earth's temperature. GHGs that are regulated by the State and/or Environmental Protection Agency (EPA) are carbon dioxide (CO_2), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons, sulfur hexafluoride (SF₆) and nitrous oxide (NO_2). CO₂ emissions are largely from fossil fuel combustion. In California, approximately 43 percent of the CO₂ emissions come from cars and trucks. Electricity generation is another important source of CO₂ emissions. Agriculture is a major source of both methane and NO₂, with additional methane coming primarily from landfills. Most HFC emissions come from refrigerants, solvents, propellant agents and industrial processes, and persist in the atmosphere for longer periods of time and have greater effects at lower concentrations compared to CO₂. The adverse impacts of global warming include impacts to air quality, water supply, ecosystem balance, sea level rise (flooding), fire hazards, and an increase in health related problems.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, was adopted in September 2006 and requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through regulations to reduce emissions from stationary sources and from vehicles. CARB is the State agency responsible for developing rules and regulations to cap and reduce GHG emissions. In addition, the Governor signed Senate Bill 97 in 2007 directing the California Office of Planning and Research to develop guidelines for the analysis and mitigation of the effects of greenhouse gas emissions and mandating that GHG impacts be evaluated in CEQA documents. CEQA Guidelines Amendments for GHG Emissions were adopted by OPR on December 30, 2009. The NSAQMD has prepared a guidance document, *Guidelines for Assessing Air Quality Impacts of Land Use Projects*. Therefore, in order to satisfy CEQA requirements, projects should make a reasonable attempt to quantify, minimize and mitigate GHG emissions as feasible.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The proposed project would not result in the generation of additional vehicle trips. During site preparation and construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor 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 . Furthermore, 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; however, construction is temporary and would produce minimal GHG emissions. These emissions are considered minimal when compared to the more than 456,800,000 metric tons of CO_2 emitted in California each year. Impacts on GHG emissions would be less than significant during construction and operation of the proposed project.

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

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2025.

California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 at 427 million metric tons (MMT) of CO₂eq. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to goal climate change. The Scoping Plan was approved by the California Air Resources Board (CARB) on December 11, 2008, and includes measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB 2008). The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliances mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The measures in Scoping Plan would not be binding until after they are adopted through the normal rulemaking process and therefore are only recommendations at this time. The CARB rulemaking process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by an CARB hearing and rule adoption.

The California Environmental Protection Agency Climate Action Team (CAT) and the CARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses, local government and community groups, and State incentive and regulatory programs. These include the CAT's 2006 "*Report to Governor Schwarzenegger and the Legislature*," CARB's 2007 "*Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California*," and CARB's "*Climate Change Scoping Plan: a Framework for Change*." The reports identify strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05 and AB 32.

The adopted Scoping Plan includes proposed GHG reductions from direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as cap-and-trade systems.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB to identify a list of "discrete early action GHG reduction measures" that can be adopted and made enforceable by January 1, 2010. In June 2007 CARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that are required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures.

ARB's focus in identifying the 44 early action items was to recommend measures that ARB staff concluded were "expected to yield significant GHG emission reductions, are likely to be cost-effective and technologically feasible." The combination of early action measures is estimated to reduce State-wide GHG emissions by nearly 16 MMT. Accordingly, the 44 early action items focus on industrial production processes, agriculture, and transportation sectors. Early action items associated with industrial production and agriculture do not apply to the proposed project. The transportation sector early action items such as truck efficiency, low carbon fuel standard, proper tire inflation, truck stop electrification and strengthening light duty vehicle standards are either not specifically applicable to the proposed project or would not result in a reduction of GHG emissions associated with the project. State measures include emission reductions assumed as part of the Scoping Plan, including light-duty vehicle GHG standards ("Pavley standards"), low carbon fuel standard, and energy efficiency measures.

The proposed project would not conflict with the State goal of reducing GHG emissions and would not conflict with the AB 32 Scoping Plan or the early action measures.

The project would be subject to all applicable permit and planning requirements in place or adopted by Nevada County. Therefore, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant, and no impacts from the project would occur.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	HAZARDS AND HAZARDOUS MATERIALS		-		
Would	the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		•		
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		•		
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				•
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 located 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?				

Environmental Setting

Title 22 of the California Code of Regulations (CCR) includes state hazardous waste regulations which are enforced by the California Department of Toxic Substance Control (DTSC) and local agencies. Hazardous waste control laws enforced by the DTSC are included in the California Health and Safety Code. These regulations identify standards for the classification, management, and disposal of hazardous waste.

With the exception of the community of Hirschdale located southwest of the project alignment, most of the project occurs within a generally undeveloped area. Hazardous materials use/misuse, storage, leaks, or spills were not found for the alignment or observed to occur within the alignment. However, there is potential for occurrence of asbestos containing materials and/or lead based paint at the Hirschdale Bridge that is to be rehabilitated and for concentrations of aerially deposited lead adjacent to Hirschdale Road and Interstate 80. An Initial Site Assessment (ISA) was prepared by Blackburn Consulting in February 2014 and an ISA Addendum was prepared and approved (Dokken Engineering 2018) for the proposed project. Additionally, a Phase II Sampling and Analysis Report was completed by Holdrege and Kull in March 2017 (Holdrege and Kull 2017). The information for the following section is partially based on this study.

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

The proposed project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within the designated staging area for the project. The use of hazardous materials would be temporary, and the proposed project would not include a permanent use, routine transport or disposal of hazardous materials.

According to the updated ISA Addendum (Dokken Engineering 2018), the 2017 Phase II site investigation did not identify naturally occurring asbestos (NOA) or Asbestos Containing Materials (ACM) within the project limits. However, site investigations did find concentrations of aerially deposited lead, but the total lead in soil was not at concentrations that would classify the soil as hazardous waste. Specific soil handling procedures are required pursuant to the Statewide Agreement (DTSC 2016) when ADL is present. Additionally, paint on the guardrails of both bridges was identified as containing lead. With the implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ- 4 project impacts would be less than significant with mitigation incorporated.

Mitigation Measure HAZ-1:

The County will provide the Phase II Sampling and Analysis for the Hirschdale Road Bridges to the contractor. Pursuant to California Code of Regulations (CCR) Title 8, Section 1532.1, the contractor performing the work is required to prepare a lead compliance plan and perform lead awareness training. The project special provisions will address these requirements, as set forth by the Division of Environmental Analysis guidance for special provisions related to earth material containing lead at concentrations that are non-hazardous according to Caltrans special provisions.

Mitigation Measure HAZ-2:

Soil at locations HBTR-SS-7A, HBHO-SS-2A, and HBHO-SS-6A shall be covered with one foot of clean soil or with pavement, or alternately the upper six inches of soil shall be excavated, stockpiled, placed as fill, and covered with at least one foot of clean soil or with pavement. The soil shall not be stockpiled or buried outside of the project construction corridor, and soil excavated from these areas shall be placed above the ordinary high water mark of the Truckee River.

Mitigation Measure HAZ-3:

During all handling of ADL-contaminated soil (including excavation, loading and unloading from vehicles, and all handling related to stockpiling and burial), fugitive dust control measures are required

(using water or other palliatives) pursuant to Caltrans regulations and the regulations of the local air quality management district. If visible dust migration beyond the project limits occurs during any activity associated with ADL-contaminated soil, then the activity should be stopped until remedial actions are taken or other conditions change that enable resumption of the activity without dust migration.

Mitigation Measure HAZ-4:

The contractor will contact the California Division of Occupational Safety and Health (Cal/OSHA) if more than 100 square feet of paint on bridge guardrails will be disturbed, and the contract will address the provisions set forth by the Division of Environmental Analysis guidance for special provisions related to disturbance of existing paint systems on bridges, according to Caltrans special provisions.

With implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3 and HAZ-4, impacts would be less than significant with mitigation incorporated.

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?

The discussion provided above indicates that hazardous materials such as fuels and oils may be used with equipment during project construction. ACM and LCP may be present in the project bridges. Additionally, ADL may be present in soil adjacent to Hirschdale Road and I-80. Such hazardous materials could create a significant hazard to the public or the environment if released into the environment. Implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3 and HAZ-5 below, would reduce such impacts to less than significant with mitigation incorporated.

Mitigation Measure HAZ-5:

The contractor shall prepare spill and leak prevention procedures prior to the commencement of construction activities. The procedures shall include information on the nature of all hazardous materials that shall be used on-site. The procedures shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided.

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

No schools are located within one-quarter mile of the project site. No impact would occur.

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 Environmental Data Report (EDR) the proposed project would not be located on or immediately adjacent to a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project would not create a significant hazard to the public or the environment; therefore, no impacts would occur.

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?

The project site is not within two miles of a public airport. No impacts would occur.

f) For a project located 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 project site is not located within the vicinity of a private airstrip. No impacts would occur.

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

Emergency access in the project vicinity has been designated by the Town of Truckee in coordination with Nevada County through the "Greater Truckee Area Emergency Preparedness and Evacuation Guide." According to the guide, the nearest designated primary community evacuation route begins at the intersection of Hirschdale Road and Glenshire Drive. Residents of the community of Hirschdale (adjacent to the southern portion of the project site) in the event of an emergency where evacuation is needed would travel north on Hirschdale Road and connect with Glenshire Road. Glenshire Road continues through the community of Glenshire and connects with Donner Pass Road in the Town of Truckee. From this point evacuees can access Interstate 80 (I-80) to leave the area.

Residents of Hirschdale currently have a potential secondary route to leave and enter the community; however, this access is not viable as an emergency route as it is blocked at three separate locations by security gates. Residents would travel east on Hirschdale Road over the Truckee River Bridge and Hirschdale Road Overhead and turn north onto Hinton Road. Hinton Road continues under I-80 and connects with West Hinton Road which then continues until this road connects with Stampede Meadows Road. This secondary route is longer than the designated primary community evacuation route and is mostly comprised of unpaved roads that are more difficult to pass with lower clearance vehicles. Additionally, this route currently traverses the gated Boca Quarry.

Implementation of the proposed project would result in the replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead, and slightly improve the use of this secondary route by residents of Hirschdale. This secondary route is not an emergency access/departure route designated by Nevada County. Residents would continue to leave the Hirschdale area in the event of an emergency by accessing Glenshire Road which is designated as the primary community evacuation route for the area. Implementation of the proposed project would not impair or physically interfere with the designated primary community evacuation route; therefore, no impacts would occur.

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 project site is within a region identified by the California Department of Forestry to be particularly prone to wildland fire. Additionally, the area is listed as a Very High Fire Hazard Severity Zone by the County (Nevada County 2019a). Although the project is within a high fire risk zone, the project would comply with California State laws regarding construction safety orders and construction fire protection and prevention (California Code of Regulations Subchapter 4. Article 36). Therefore, the project would not create a significant risk of loss, injury or death involving wildland fires, or create any new urbanized areas or residences intermixed with wildland. No impacts would occur.

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION HIRSCHDALE ROAD BRIDGES PROJECT

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HYDROLOGY AND WATER QUALITY				
Would	the project:				
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 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 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 stormwater 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 of as a result of the failure of a levee or dam?				•
j)	Inundation by seiche, tsunamis or mudflow?				

Environmental Setting

The project is located along and adjacent to the Truckee River in rural Nevada County. The project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board.

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

The project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board under the direction of the California State Water Resources Control Board. Development of the proposed project would include the replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead.

The project will disturb greater than one acre; therefore, a Construction Storm Water General Permit is required, consistent with Construction General Permit Order issued by the State Water Resources Control Board to address storm water runoff. The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This permit will also require the County to prepare and implement a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. The project will also follow permits acquired from the U.S. Army Corps of Engineers (USACE) for Section 401 of the Clean Water Act (CWA) and CDFW Section 1602 Streambed Alteration Agreement. WQ-1 to WQ-7 is required to ensure the project grading will conform to State Water Resources Control Board standards and in doing so will ensure the project impacts will be less than significant with mitigation.

Mitigation Measure WQ-1:

Any requirements for additional avoidance and minimization measures will be contained in the permits obtained from all required regulatory agencies.

Mitigation Measure WQ-2:

The proposed project would require a National Pollutant Discharge Elimination System (NPDES) General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 2012-0006-DWQ).

Mitigation Measure WQ-3:

The construction contractor will adhere to the State Water Resources Control Board (SWRCB) NPDES Permit pursuant to Section 402 of the CWA. This permit authorizes storm water and authorized non-storm water discharges from construction activities. All applicable BMPs will be followed to ensure that adequate measures are taken during construction to minimize impacts to water quality.

Mitigation Measure WQ-4:

The construction contractor will adhere to the State Water Quality Certification Permit pursuant to Section 401 of the CWA. This permit regulates discharges of fill and dredged material to all waters of the state, including waters of the U.S. under CWA section 401 and the Porter-Cologne Water Quality Control Act. All applicable measures within the approved permit will be applied to the final project specifications.

Mitigation Measure WQ-5:

The construction contractor will adhere to the California Department of Fish and Wildlife Streambed Alteration Agreement Permit pursuant to Section 1602 of the Fish and Game Code. This

permit authorizes any activity that would result in the modification of the bed, bank, or channel of a stream, river, or lake, including water diversion and damming and removal of vegetation from the floodplain to the landward extent of the riparian zone. All applicable measures within the approved permit will be applied to the final project specifications.

Mitigation Measure WQ-6:

Permanent treatment control BMPs will be evaluated based on effectiveness and feasibility and incorporated into the final design as applicable.

Mitigation Measure WQ-7:

Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources.

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)?

The proposed project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. Therefore, there would be no impact related to depletion of groundwater supplies or interference with groundwater recharge.

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

No substantial alterations of the existing drainage patterns on site will occur. Drainage on the site will remain along natural drainage courses, similar to prior construction conditions. The project storm water drainage would be designed consistent with County requirements and Caltrans Project Planning and Design Guide and Storm Water Management Plan and will remain natural; therefore, no impacts would occur.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The project will not alter the course of the Truckee River. Drainage will remain similar to pre-construction conditions. Roadway drainage would be designed consistent with County requirements and Caltrans Project Planning and Design Guide and Storm Water Management Plan and will remain substantially similar to existing conditions. The project is anticipated to have no impact on the rate of surface runoff or flooding as a result of altered drainage patterns.

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

Construction activities associated with the project would include disturbances to the ground surface from existing bridge and abutment replacement, and grading. Removal of the existing riparian vegetation would increase the potential for slope erosion. These activities could potentially increase the amount of sediments, fuels and lubricating oils entering the Truckee River. Runoff during the winter season is of greater concern due to the potential erosion of unprotected or graded surfaces during rain events. Sediments, fuels, and lubricating oils could potentially harm aquatic resources and water quality.

Suspended material is considered a pollutant of primary concern for construction projects. Exposure of loose soil during excavation, grading, and filling activities during construction and its erosion is the primary

source of suspended material. Construction activities inside or near the channel consist of removing the Truckee River Bridge superstructure, temporary access road, temporary trestle, and pier excavations. Cofferdams will also be used temporarily in the channel for pier excavations and new pier construction. These activities could temporarily increase the sediment load thus increasing the turbidity, and total dissolved solids present in stream water. Since a portion of the construction will take place within the streambed, it is important that the water in the river be protected from increases in the sediment load, turbidity, total dissolved solids, fuels and lubricating oils generated during construction.

Accidental spills of petroleum hydrocarbons (fuels and lubricating oils) and or concrete waste are also a concern during construction activities and would be avoided and minimized through the implementation of BMPs. An accidental release of these wastes could adversely affect groundwater quality, vegetation, and wildlife habitat, but the impact is expected to be acute and not cause a long-term impact.

Implementation of mitigation measures BIO-2, BIO-3 and WQ-1 through WQ-7 would reduce the impacts related to erosion or siltation to less than significant with mitigation incorporated.

f) Otherwise substantially degrade water quality?

The project may have short-term impacts associated with sediment and runoff during grading and construction. Material imported during this process will be kept in piles of staged soil, and/or re-graded and distributed within the project site. As noted above, the project is subject to NPDES regulations since these improvements will exceed one acre. Compliance with existing regulations and implementation of BMPs would reduce potentially significant impacts associated erosion or siltation on- or offsite to levels less than significant. Implementation of mitigation measures BIO-2, BIO-3, and WQ-1 through WQ-7, would reduce the impacts related to erosion or siltation to less than significant with mitigation incorporated.

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 does not include housing and would not place structures within a 100-year flood hazard area. No impacts would occur.

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

The project is a bridge replacement and rehabilitation project and project activities will not impede flows within the Truckee River; however, the project would change flows within the Truckee River, creating a beneficial flow regime for the Truckee River. The replacement of the Truckee River Bridge would remove the four existing piers within the Truckee River channel and the new replacement bridge would have only 1 pier within the river's live channel. According to the project's updated Location Hydraulic Study (WRECO 2019) the proposed project would result in a localized increase of the Truckee River water surface elevations upstream of the proposed replacement bridge, but not increase the overall floodplain footprint, and would result in an overall lowering of the water surface profile upstream of the bridge and reduced backwater effects. The project has been designed to minimize floodplain impacts and no specific mitigation measures are required; therefore, impacts from placement of structures within a 100-year flood hazard area would be less than significant.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?

The proposed project includes the replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead. The proposed project does not include the development of residential or commercial uses that would be occupied with people. The project will comply with Caltrans local assistance guidelines for hydraulic freeboard between the bridge and the 50-year/100-year water surface elevations.

Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding from a levee or dam failure. No impacts would occur.

j) Inundation by seiches, tsunamis or mudflow?

No surface water bodies likely to be affected by seiches are located in the vicinity of the project site. Given the distance from the coast and other water bodies the project site would not be affected by tsunamis. As the project area is relatively flat, no impacts from mudflows would be expected. No impacts would occur.

X.	LAND USE AND PLANNING	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would	the project:				
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, specific plan, local coastal program, 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?				

Environmental Setting

The proposed project is located in a rural part of Nevada County approximately 0.05-mile northeast of the Hirschdale community and 6 miles northeast of the Town of Truckee. The project area includes rural residential and open space lands. The Nevada County General Plan policies are applicable to the proposed project area.

a) Physically divide an established community?

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The project site is located in a rural area surrounded by high sierra desert, a rock quarry, and scattered rural residences. The small community of Hirschdale is located adjacent to the western portion of the project site; however, the bridges do not link sections of the existing community, so project construction would not physically divide this community. No impacts would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project does not involve a change in land use and the project is planned in accordance with the Nevada County General Plan. The project would not conflict with applicable land use plans, policies, or regulations. No impacts would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The proposed project site is not covered by a habitat conservation plan or natural community conservation plan. No impacts would occur.

		Potentiall y Significan t Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	MINERAL RESOURCES		-		
Would	the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				•
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?				-

Environmental Setting

Nevada County has been historically mined for gold, quartz, several stone types including granite and marble, and aggregate materials.

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?

The proposed project is located on land that is zoned for residential/agricultural and open space. No loss of availability of mineral resources will occur from proposed project activities within the project area. No impacts to mineral resources that would be of value to the region and residents of the State would occur.

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?

The proposed project is not within a site delineated on local general plan, specific plan, or other land use plan as a Mineral Extraction Combining District (ME); therefore, the project would not result in the loss of availability of locally-important mineral resources recovery. No impacts to sites listed as mineral resources recovery areas would occur.
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	NOISE				
Would	the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		•		
b)	Exposure of persons to or generation of excessive ground borne vibration or ground borne 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?				•

Environmental Setting

The project site is located in a rural part of Nevada County containing mostly of open space with a few scattered rural residences.

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?

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location.

A decibel (dB) is a unit of measurement which indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments.

Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness. Conversely, a doubling

of a noise source would result in a 3 dBA increase in noise levels from that noise source. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The day night level (L_{dn}) is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dBA added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m. (defined as sleeping hours).

The County of Nevada addresses noise in the Noise Element of the General Plan and in the noise ordinances of the Land Use Code. The Noise Element contains the County's performance standards and land use noise compatibility criteria; the Land Use Code contains the County's operational exterior noise limits standards. As noted in Policy 9.1.f of the Noise Element and Section L-II 4.1.7.D.8 of the Land Use Code, the land use compatibility criteria and the operational noise limits standards do not apply to activities associated with the actual construction of a project. However, implementation of the proposed project could result in substantial temporary increases in noise levels at noise sensitive uses in the project vicinity compared to noise levels without the project.

Construction noise is also regulated by the Caltrans Standard Specifications and by Caltrans Standard Special Provisions. These regulations require that noise levels generated during construction should comply with applicable local, state, and federal regulations.

Construction of the Project would result in a temporary increase in the noise environment. During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 70 to 90 dBA L_{max} at a distance of 50 feet.

<u> </u>		
	Range of Maximum	Suggested Maximum Noise
	Noise Levels	Levels for Analysis
Type of Equipment	(dBA at 50 feet)	(dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Concrete saw	85 to 93	90
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Hoe Ram	85 to 93	90
Rollers	75 to 82	80
Dozers	77 to 90	85
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe and Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

 Table E: Typical Construction Equipment Maximum Noise Levels (Lmax)

Source: Bolt, Bernak & Newman, 1987. Noise Control for Buildings and Manufacturing Plants.

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The closest sensitive receptors are residential land uses located as close as approximately 200 feet from the Truckee River Bridge project limits and approximately 1,000 feet from the Hirschdale Road Overhead project limits. Replacement, rehabilitation, debris removal, and roadway approach improvement activity noise would be short-term and intermittent. Further, implementing the following measures would minimize these temporary noise impacts on any sensitive receptors in the project vicinity:

Mitigation Measure NOISE-1:

- a) The Contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.
- b) Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler.
- c) Where feasible, the project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- d) The construction contractor shall locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.
- e) To avoid sleep disturbance of noise sensitive receptors, all noise producing construction activities within 1,000 feet of residential land uses, including warming-up or servicing equipment or trucks and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 6:00 p.m. on Saturdays and Sundays. No construction shall be permitted on official national holidays, except as otherwise authorized by the Engineer.
- f) As directed by the County, the Contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, and notifying adjacent residents in advance of construction work.

With implementation of Mitigation Measure NOISE-1 temporary noise impacts would be less than significant with mitigation incorporated.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

No permanent noise sources exposing persons to excessive ground borne vibration or noise levels would be located within the project site. Therefore, implementation of the proposed project would not permanently expose persons within or around the project site to excessive ground borne vibration or noise.

The analysis for the proposed project assumes normal propagation of vibration through the soil in the project vicinity. The closest noise sensitive land uses are located approximately 200 feet from the project limits. At this distance, groundborne vibration from construction activities associated with implementation of the proposed project, such as the use of hydraulic breakers (or hoe rams), could range up to approximately 0.004 Peak Particle Velocity (PPV) which would be less than the FTA's groundborne vibration damage impact criteria of 0.12 PPV for the buildings considered extremely susceptible to vibration damage. Furthermore, these vibration levels would not result in interior vibration levels at the nearest residential structures that would cause disturbance to persons of normal sensitivity. Therefore, project-related groundborne vibration impacts would be less than significant.

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

The proposed project will not result in permanent increase in noise. The proposed project would replace and rehabilitate existing structurally deficient bridges. Therefore, no substantial long-term increase in ambient noise levels is expected as a result of project implementation. No impact would occur.

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

Project-related construction activities could result in substantial temporary or periodic increases in ambient noise levels. As shown in the impact discussion of Section I.a) above, these noise levels could range up to 93 dBA L_{max} at a distance of 50 feet from an active project area. With implementation of Mitigation Measure NOISE-1 identified above, temporary noise impacts would be less than significant; therefore, the project impacts would be less than significant with mitigation incorporated.

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 within two miles of a public airport or within the vicinity of a private airstrip. No impact would occur.

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?

Refer to XII.e. No impact would occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	POPULATION AND HOUSING				
Would	the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				•
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?				

Environmental Setting

The project site is located in a rural portion of Nevada County containing mostly forest lands with a few scattered rural residences.

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)?

The proposed project would improve traffic safety for vehicles due to replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead, which are both functionally deficient. No new homes or developments are proposed as part of the project. The proposed project would not induce population growth in the area. The proposed project site is located within land designated as Open Space (OS), Interim Development Reserve (IDR), and Residential Agricultural (RA). The proposed project would continue to provide road access to a previously accessible portion of the County and would not result in expansion of the roadway network that may result in an increase in population and/or housing. Therefore, the project would have no impact on population and housing.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

See XIII.a. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

See XIII.a. No impact would occur.

XIV.	PUBLIC SERVICES	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 new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				•
	Fire protection?				
	Police protection?				
	Schools?				
	Parks?				
	Other public facilities?				

Environmental Setting

General public safety and law enforcement services for the project area are provided by the County Sheriff. The County Fire District provides fire protection services and emergency services to the project area.

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

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The proposed project would not increase demand for public services, nor degrade the quality of existing public services. There are no recreational areas or public facilities located within the project vicinity that would be impacted by the proposed project. No impacts would occur.

XV.	RECREATION	Potentiall y Significan t 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?				•
c)	Will the project conflict with established recreation uses of the area, including biking equestrian and/or hiking trail?				

Environmental Setting

The project site is located in a rural part of Nevada County containing mostly open space with a few scattered rural residences. There are no developed neighborhood or regional parks or other recreational facilities within or adjacent to the project area.

The proposed project is located in the vicinity of the Truckee River. This segment of the Truckee River offers opportunities for recreation including fishing, swimming, and rafting for locals, but no designated recreational facilities are located within the project area. Currently, the local population accesses the western banks of the Truckee River by crossing privately owned land east of Hirschdale Road and accesses the eastern banks of the Truckee River by crossing the Truckee River Bridge and crossing privately owned land. The only public access to the Truckee River in the vicinity of the proposed project is the 80-foot wide (approximately) County-owned ROW where Hirschdale Road crosses over the Truckee River (the eastern and western bank immediately under the existing Truckee River Bridge). Other than the area immediately under the Truckee River Bridge all other Truckee River access in the project vicinity is through privately owned parcels.

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?

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The proposed project would not increase the use of any designated recreational facility. No impacts would occur.

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?

The proposed project does not include recreational facilities or require the construction of recreational facilities; therefore, no impacts to recreational facilities or construction or expansion of recreational facilities will occur.

c) Will the project conflict with established recreation uses of the area, including biking equestrian and/or hiking trail?

During construction, access to vehicular, pedestrian, and bicyclist traffic along Hirschdale Road over the Truckee River, will remain open to recreation enthusiasts through the use of the project temporary trestle, Access to and from the eastern and western banks of the Truckee River will continue through construction. Only temporary closures for construction activities may take place for short durations. The project will require some restrictions of pedestrian or recreational access for safety purposes directly under and within the surrounding construction areas of the Truckee River Bridge during construction activities, but these restrictions will only be temporary. Therefore, no impacts to recreational access will occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI.	TRANSPORTATION/TRAFFIC		-		
Would	the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				•
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 result 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?				

Environmental Setting

The proposed project includes replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead. Traffic in the area is mainly from residents, and some recreational users. Average daily traffic at the Truckee River Bridge and Hirschdale Road Overhead are less than 70 trips per day.

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 project would not conflict with any applicable plans or policies establishing measures of effectiveness for the performance of the circulation system. During project construction, pedestrian, bicyclist, and vehicle traffic would be provided access over the temporary trestle bridge to access the east side of the Truckee River. With implementation of the temporary trestle project component, no conflicts with the circulation DOKKEN ENGINEERING 2019

system are anticipated; therefore, no impacts to applicable plans, ordinances or policies relating to transportation would occur.

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?

The proposed project would not modify the existing circulation pattern. Nevada County staff surveyed traffic on Hirschdale Road at the bridges and determined average daily traffic is 66 trips per day, with an estimated 7 peak hour trips. Based on a recent traffic analysis conducted for the intersections of Stampede Meadows Road and West Hinton Road¹, level of service (LOS) in the project vicinity, even with any additional of cumulative traffic generated by the quarry, would operate at an acceptable LOS B. Assuming all of these 7 peak hour trips would continue use over the temporary trestle, LOS and roadway capacity would not be impacted by project implementation. No increase in traffic would impact existing traffic operations, including traffic contributed by recreationalists, bicyclists, anglers, campers, and boaters. The proposed project would not result in an increase in LOS or exceed the standards established by Nevada County. To further remain consistent with the traffic operations, Mitigation Measure TRAF-1 would be implemented; therefore, project impacts would be less than significant related to service standards and travel demand.

Mitigation Measure TRAF-1

To minimize temporary impacts to residents during construction, with the exception of activities necessary to replace the Truckee River Bridge on Hirschdale Road and rehabilitate the Hirschdale Road Overhead, construction staging areas and construction traffic shall avoid the community of Hirschdale to the extent possible by establishing primary staging areas and using temporary trestle as primary access to and from the project site during construction.

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

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The proposed project does not have design features that are tall enough to impact air traffic patterns in the area. Therefore, project implementation would have no impact on air traffic patterns.

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

During construction, Hirschdale road between the Truckee River Bridge and Hirschdale Road Overhead will remain open, with durations of temporary closures of short periods for construction needs. Per construction BMPs required by Caltrans and Nevada County, road signs (or barriers if needed) would be placed at the western and eastern approach to the Truckee River Bridge to direct motorists across the temporary trestle over the Truckee River. The proposed roadway improvements would not include sharp curves, dangerous intersections, or incompatible uses. No impacts would occur.

e) Result in inadequate emergency access?

Emergency access in the project vicinity has been designated by the Town of Truckee in coordination with Nevada County through the "Greater Truckee Area Emergency Preparedness and Evacuation Guide." According to the guide, the nearest designated primary community evacuation route begins at the intersection of Hirschdale Road and Glenshire Drive. Residents of the community of Hirschdale (adjacent to the southern portion of the project site) in the event of an emergency where evacuation is needed would travel north on Hirschdale Road and connect with Glenshire Road. Glenshire Road continues through the community of Glenshire and connects with Donner Pass Road in the Town of Truckee. From this point evacuees can access Interstate 80 (I-80) to leave the area.

Residents of Hirschdale currently have a potential secondary route to leave and enter the community; however, this access is not viable as an emergency route as it is blocked at three separate locations by security gates. The route consists of traveling east on Hirschdale Road over the Truckee River Bridge and Hirschdale Road Overhead and turning north onto Hinton Road. Hinton Road continues under I-80 and connects with West Hinton Road which then continues until this road connects with Stampede Meadows Road. This secondary route is longer than the designated primary community evacuation route and is mostly comprised of unpaved roads that are more difficult to pass with lower clearance vehicles. Additionally, this route currently traverses the Boca Quarry.

Implementation of the proposed project would result in the replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead, and slightly improve the use of this secondary route by residents of Hirschdale. This secondary route is not an emergency access/departure route designated by Nevada County. Residents would continue to leave the Hirschdale area in the event of an emergency by accessing Glenshire Road which is designated as the primary community evacuation route for the area. Additionally, emergency access across the Truckee River Bridge will be maintained through use of temporary trestle bridge. Implementation of the proposed project would not impair or physically interfere with the designated primary community evacuation route; therefore, no impacts would occur.

f) Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The proposed project would not conflict with policies supporting alternative transportation. The proposed project is located in rural Nevada County and alternative forms of transportation are not readily available in this area. Pedestrians and bicyclists will continue to share the roadway after the proposed project has occurred, and the bridge will be equipped with pedestrian/bicyclist safety railings on either side of the bridge on top of the bridge traffic barriers. No impact would occur.

XVII	TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in 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:				
i)	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), or		•		
ii)	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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		•		

Environmental Setting

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The cultural resources report research did not identify any tribal cultural resources (TCRs) within the APE.

i. 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), or

TCR identification efforts consisted of pedestrian surveys, background research, a search of site records and survey reports on file at the NCIC, a search of the Sacred Lands File at the NAHC, and coordination with Native American Tribal Governments. As a result of these efforts, no TCRs were identified within the project area. Although no TCRs were identified which would be impacted by the project, there is always a possibility that unanticipated discoveries may occur during project construction. By incorporating Mitigation Measures CULT-1, CULT-2, and CULT-3 discussed in Section III Cultural Resources and Mitigation Measure TCR-1 discussed below, impacts to TCRs would be reduced to less than significant, should they be encountered during construction.

ii. 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

On June 25, 2012, LSA Associates, Inc. (LSA) sent a letter describing the project with maps depicting the APE to the Native American Heritage Commission (NAHC) in Sacramento asking the Commission to

review their Sacred Lands File for any Native American cultural resources that might be affected by the project. Also requested were the names of Native Americans who might have information or concerns about the project. Katy Sanchez, NAHC Program Analyst, in a fax dated July 11, 2011, informed LSA that a records search of the Sacred Lands File did not "indicate the presence of Native American cultural resources in the immediate project area." Ms. Sanchez also provided a list of Native American contacts.

Due to the project's change in scope and size, an additional request was sent to the NAHC on December 22, 2016 requesting a new search of the Sacred Lands File and a new contact list of Tribal Governments with whom to consult on the project. On December 22, 2016, Frank Lienert, Associate Governmental Program Analyst of the NAHC, replied via digital fax that a search of the Sacred Lands File was completed for the APE with negative results. A list was also provided which indicated that the Tsi-Akim Maidu, the United Auburn Indian Community of the Auburn Rancheria (UAIC), and the Washoe Tribe of Nevada and California should be contacted regarding additional information about the project area. Project notification letters were sent to these three tribes on January 4, 2017 and February 28, 2017. None of the three tribes identified any TCRs within the project area. Further, as detailed in the response to Question a(i) above, additional TCR identification efforts consisted of pedestrian surveys, background research, and a search of site records and survey reports on file at the NCIC. No TCRs were identified as a result of these additional identification efforts.

Although no TCRs were identified which would be impacted by the project, there is always a possibility that unanticipated discoveries may occur during project construction. By incorporating Mitigation Measures CULT-1, CULT-2, and CULT-3 discussed in Section III Cultural Resources and Mitigation Measure TCR-1 discussed below, impacts to TCRs would be reduced to less than significant, should they be encountered during construction. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measure TCR-1:

In the event that Tribal Cultural Resources (TCRs) are inadvertently discovered during the course of constructing this project, work shall be halted in that area. The County of Nevada shall immediately contact a qualified archaeologist and the Washoe Tribe of Nevada and California to assess the significance of the discovery. Should it be determined that the Native American cultural resource is an eligible TCRs, the County shall determine appropriate mitigation in consultation with the Washoe Tribe of Nevada and California. Construction activities shall not resume until mitigation measures have been completed. Further, the County shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to TCRs.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII	UTILITIES AND SERVICE SYSTEMS				
Would	the project:				
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 waste?				-

Environmental Setting

Public utilities for the few residences adjacent to the project area are provided by Truckee Sanitary District – Eastern Nevada County (wastewater) and Tahoe Truckee Sierra Disposal (solid waste).

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The proposed project does not include features that would generate wastewater. Therefore, project implementation would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. No impacts would occur.

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?

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. The project will not require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities. No impacts would occur.

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?

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. No new storm water drainage facilities or expansion of existing facilities will occur. No impacts would occur.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction of the proposed project would use a nominal amount of water (e.g., for dust control). This water would be brought on site and stored in water trucks for the duration of project construction. No impacts would occur.

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?

The proposed project would replace the existing Truckee River Bridge and rehabilitate the existing Hirschdale Road Overhead, both structurally deficient bridges. As a non-capacity increasing transportation project, the project would not increase demand for wastewater treatment processes. No impacts would occur.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Within the Truckee Tahoe area of eastern Nevada County, the town of Truckee holds a franchise agreement with the Tahoe Truckee Sierra Disposal (TTSD). TTSD operates the Eastern Regional Landfill Materials Recovery Facility (MRF) and Transfer Facility, where construction waste is sorted and processed. The MRF is located between Truckee and Squaw Valley on State Highway 89 at 900 Cabin Creek Road. The MRF provides sorting of construction materials for recycling and an average 35% diversion is achieved on the construction material sort line.

During project development, construction solid waste would be generated due to replacement of the Truckee River Bridge and rehabilitation of the Hirschdale Road Overhead. All construction generated solid waste associated with the proposed project would be hauled off-site to the TTSD MRF. The MRF does not have an intake capacity limit per day for construction debris, and no issues are anticipated for the expected volume of concrete and asphalt debris. The TTSD MRF would have enough capacity to intake the debris generated during the proposed project construction. Solid waste would not be generated during operation of the proposed project. Construction of the proposed project would generate a nominal amount of construction related waste that would be accepted at the nearest landfill. Impacts would be less than significant.

g) Comply with federal, State, and local statutes and regulations related to solid waste?

The California Integrated Waste Management Act of 1989 (AB 939) required that all City and County jurisdictions in the state prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan that identifies how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by year 1995 and 50 percent by year 2000. The purpose of AB 939 was to reduce, recycle, and reuse solid waste generated in California to the maximum extent feasible. In 2002, SB 1374 (Construction and Rehabilitation Waste Materials Diversion Requirements) added Public Resource Code Section 42912 requiring jurisdictions to include in their annual AB 939 report a summary of the progress

made in diverting construction and rehabilitation debris. In 2006, the unincorporated portions of Nevada County had a solid waste diversion rate of 50 percent.¹

Solid waste debris generated during project construction would be collected and hauled to the TTSD MRF. Any debris that could be recycled, would be, and thus would help Nevada County maintain a solid waste diversion rating above 50 percent. All non-recyclable material generated during construction would then be hauled to an out-of-county landfill for disposal. The proposed project would comply with statutes related to solid waste disposal and recycling. Therefore, no impact would occur.

¹ CalRecycle, Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report, http://www.calrecycle.ca.gov/lgcentral/Reports/jurisdiction/diversiondisposal.aspx. Accessed April 22, 2014.

XIX.	MANDATORY FINDINGS OF	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	SIGNIFICANCE				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		•		
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?			•	

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?

Development of the proposed project would comply with all local, state, and federal laws governing general welfare and environmental protection. The project will not substantially reduce habitat for fish or wildlife, cause wildlife populations to decrease, threaten plant and animal communities, restrict plant and animals range, or eliminate important examples of California's history or prehistory. During construction, the project has the potential for significant impacts to biological and cultural resources. Potential significant with mitigation incorporated by implementing Mitigation Measures BIO-1 through BIO-5, CULT-1 through CULT-4, TCR-1, and WQ-1 through WQ-5.

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.)

Review was conducted to determine if past or future projects have been or would be implemented in the proposed project area thus potentially resulting in cumulative impacts to resources. The nearest related project to the proposed project site is the Boca Quarry Project that has been approved. The potential impacts

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of the proposed project are individually limited and are not cumulatively considerable. No impacts are anticipated.

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

The proposed project would comply with all local, state, and federal laws governing general welfare and environmental protection. Project implementation would not substantially degrade the quality of the existing environment, since the proposed project is a replacement of an existing structure and would not result in any significant adverse and un-mitigatable impacts that could cause adverse effects to humans. Therefore, project impacts on human beings would be less than significant, and no additional mitigation is required.

3.0 REPORT PREPARERS

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4.0 MITIGATION MONITORING AND REPORTING PROGRAM

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APPENDIX A - REFERENCES

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AB 52	Assembly Bill 52
ACHP	Advisory Council on Historic Preservation
ACM	Asbestos Containing Material
ADL	Aerially Deposited Lead
APE	Area of Potential Effects
ASR	Archeological Survey Report
BA	Biological Assessment
BFM	Bonded Fiber Matrix
BMPs	Best Management Practices
BSA	Biological Study Area
CAAQS	California Ambient Air Quality Standards
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	Climate Action Team
CCR	California Code of Regulations
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CH ₄	Methane
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
СО	Carbon monoxide
CO ₂	Carbon dioxide
CRHR	California Register of Historic Resources
CSST	Certified Site Surveillance Technician
CWA	Clean Water Act
dB	decibel
dBA	Weighted decibel
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substance Control
EDR	Environmental Data Report
EIR	Environmental Impact Report
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
GHG	Greenhouse Gases
HFCs	Hydrofluorocarbons
HPSR	Historic Property Survey Report
HRER	Historic Resources Evaluation Report
LCP	Lead Containing Paint
LCT	Lahontan Cutthroat Trout
L _{dn}	Day Night Level
LSA	LSA Associates, Inc.
MLD	Most Likely Descendent

APPENDIX B - LIST OF ABBREVIATIONS

MMT	Million Metric Tons
MND	Mitigated Negative Declaration
mph	Mile per hour
MRF	Eastern Regional Landfill Materials Recovery Facility
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NES	Natural Environmental Study
NHPA	National Historic Preservation Act
N ₂ O	Nitrous oxide
NO ₂	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NSAQMD	Northern Sierra Air Quality Management District
PM (2.5 and 10)	Particulate matter
ROW	Right-of-way
SF_6	Sulfur hexafluoride
SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resource
TTSD	Tahoe Truckee Sierra Disposal
UAIC	United Auburn Indian Community of Auburn Rancheria
VMT	Vehicle Miles Traveled
VOC	Volatile organic compounds
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

APPENDIX C - FTIP AND RTP PAGES

APPENDIX D - DISTRIBUTION LIST

A copy of the Notice of Availability has been distributed to all residents and home owners within 500 feet of the project area, and the following agencies, organizations, interested groups, and businesses.

NEVADA COUNTY	U.S. ARMY CORPS OF ENGINEERS –
DEPARTMENT OF PUBLIC WORKS	SACRAMENTO DISTRICT
950 MAIDU AVENUE	1325 J STREET, RM 1350
NEVADA CITY, CA 95959-8600	SACRAMENTO, CA 95814
CALIFORNIA STATE OF	
C/O DEPT FISH & GAME	U.S. FISH AND WILDLIFE SERVICE
1416 NINTH ST	650 CAPITOL MALL, 8 th FLOOR
SACRAMENTO, CA 95814	SACRAMENTO, CA 95814
STATE CLEARINGHOUSE	LAHONTAN REGIONAL WATER
OFFICE OF PLANNIG AND RESEARCH	QUALITY CONTROL BOARD
1400 TENTH STREET	SOUTH LAKE TAHOE OFFICE
P.O.BOX 3044	2501 LAKE TAHOE BLVD
SACRAMENTO, CA 95812-3044	SO. LAKE TAHOE, CA 96150
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
KEVIN YODER	DARREL CRUZ
UNION PACIFIC RAILROAD	WASHOE TRIBE OF NEVADA AND
9451 ATKINSON STREET	CALIFORNIA
ROSEVILLE. CA 95747	919 US HWY 395 SOUTH
	GARDNERVILLE, NV 89410
	ADRIANO E TRSTE CASTRO
ADRIANO E TRSTE CASTRO	OR CURRENT RESIDENT
309 MIRA VISTA WAY	10890 JUNIPER WAY
SOUTH SAN FRANCIS, CA 94080	TRUCKEE, CA 96161-1744
ANTHONY & MARY RIVARA	ANTHONY & MARY RIVARA
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10830 FLORISTON AVE	10846 JUNIPER WAY
TRUCKEE, CA 96161-4506	TRUCKEE, CA 96161-1744
ANTHONY & MARY RIVARA	TERRY GARCIA
POB 5522	10800 JUNIPER WAY
RENO, NV 89513	TRUCKEE, CA 96161-1744
CVNTHIA A OCONNELI	CYNTHIA A OCONNELL
10210 THOMAS DD	OR CURRENT RESIDENT
TOLICVEE CA 06161	10831 FLORISTON AVE
INUCKEE, CA 90101	TRUCKEE, CA 96161-4513
DIANE M & DUANE N TRSTES BRUNSON	GARY P TRSTE RIVARA
10931 FLORISTON AVE	9 CONCHITA CT
TRUCKEE, CA 96161	NOVATO, CA 94947
GARY P TRSTE RIVARA	GORDON E FLEIG
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10874 JUNIPER WAY	10811 FLORISTON AVE
TRUCKEE, CA 96161-1744	TRUCKEE, CA 96161-4513
GREGORY M & LISA L TRSTES LAMB	JAMES E & JOYCE R TRSTES TEEL
10866 FLORISTON AVE	115 VOLCANO RIDGE
TRUCKEE, CA 96161-4506	GRANITE BAY, CA 95746

JAMES E & JOYCE R TRSTES TEEL	JAMES E & JOYCE R TRSTES TEEL
OR CURRENT RESIDENT	OR CURRENT RESIDENT
11088 ICELAND RD	11221 MARTIS PEAK RD
TRUCKEE, CA 96161	TRUCKEE, CA 96161
JAMES E & JOYCE R TRSTES TEEL	JAMES E & JOYCE R TRSTES TEEL
OR CURRENT RESIDENT	OR CURRENT RESIDENT
16274 HINTON RD	16388 HINTON RD
TRUCKEE, CA 96161	TRUCKEE, CA 96161
	JENNIFER M FREEMAN
JASON M CAMPBELL	OR CURRENT RESIDENT
11010 JUNIPER WAY	10793 HIRSCHDALE RD
TRUCKEE, CA 96161-1751	TRUCKEE. CA 96161
ANTHONY & MARY RIVARA	
OR CURRENT RESIDENT	JERRY N & JIMMIE L BLAKELEY
10818 JUNIPER WAY	10//1 HIRSCHDALE RD
TRUCKEE. CA 96161-1744	TRUCKEE, CA 96161-4501
ANTHONY & MARY RIVARA	
OR CURRENT RESIDENT	JOHN R FINNEMORE
10955 JUNIPER WAY	2155 48TH AVE
TRUCKEE, CA 96161	SAN FRANCISCO, CA 94116
CALIFORNIA STATE OF	LARRY S & CHERYL J ANDRESEN
OR CURRENT RESIDENT	OR CURRENT RESIDENT
11308 ICELAND RD	10867 FLORISTON AVE
TRUCKEE, CA 96161	TRUCKEE, CA 96161-4513
DIANE M & DUANE N TRSTES BRUNSON	LAURA C KIRBY
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10909 FLORISTON AVE	10821 FLORISTON AVE
TRUCKEE, CA 96161-4508	TRUCKEE, CA 96161-4513
GARY PTRSTE RIVARA	
OR CURRENT RESIDENT	LOUIS J PARKER
10864 JUNIPER WAY	POB 5071
TRUCKEE, CA 96161-1744	RENO, NV 89513
GORDON E FLEIG	MELANIE W SAUNDERS
POB 2455	3714 W PINE BROOK WAY
TRUCKEE, CA 96160	HOUSTON, TX 77059
JAMES E & JOYCE R TRSTES TEEL	MET REVOCABLE LIVING TRUST
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10681 HIRSCHDALE RD	11555 HIRSCHDALE RD
TRUCKEE, CA 96161	TRUCKEE, CA 96161
JAMES E & JOYCE R TRSTES TEEL	
OR CURRENT RESIDENT	R E & MARTHA MCBRIDE
11230 HIRSCHDALE RD	8191 BELDEN BLVD
TRUCKEE. CA 96161	COTTAGE GROV, MN 55016
JAMES E & JOYCE R TRSTES TEEL	RICHARD A & SUZANNE TRSTES
OR CURRENT RESIDENT	FIGLIETTI
17555 GLENSHIRE DR	9434 VALLE VISTA ST
TRUCKEE, CA 96161	WINDSOR, CA 95492

IENNIEED M EDEEMAN	RICHARD H & MARY E TRSTES FEHRT
JENNIFER M FREEMAN POB 10456	OR CURRENT RESIDENT
TRUCKEE CA 96162	10941 FLORISTON AVE
	TRUCKEE, CA 96161-4508
JOHN N & MIRIAM H MINNIS	IOHN N & MIRIAM H MINNIS
OR CURRENT RESIDENT	$P \cap B \cap X$ 2170
10949 FLORISTON AVE	TRUCKEE CA 96160
TRUCKEE, CA 96161-4508	
JOHN R FINNEMORE	LARRY S & CHERYL J ANDRESEN
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10905 FLORISTON AVE	10791 FLORISTON AVE
TRUCKEE, CA 96161	TRUCKEE, CA 96161-4538
LARRY S & CHERYL J ANDRESEN	LARRY S & CHERYL J ANDRESEN
OR CURRENT RESIDENT	POB 34047
10953 FLORISTON AVE	TRUCKEE CA 96160
TRUCKEE, CA 96161-4508	
LAURA C KIRBY	LOUIS J PARKER
C/O KIRBY INVESTMENT INC	OR CURRENT RESIDENT
POB 2663	11018 JUNIPER WAY
TRUCKEE, CA 96160	TRUCKEE, CA 96161-1751
MATTHEW JACOBS	MATTHEW JACOBS
155 MARMOT DR	OR CURRENT RESIDENT
RENO. NV 89523	10960 JUNIPER WAY
	TRUCKEE, CA 96161-1744
MELANIE W SAUNDERS	MFT REVOCABLE LIVING TRUST
OR CURRENT RESIDENT	C/O RANDOLPH J MEZGE
11058 JUNIPER WAY	824 2ND ST
TRUCKEE, CA 96161-1751	VERDI, NV 89439
MFT REVOCABLE LIVING TRUST	PETER H TRSTE RIVARA
OR CURRENT RESIDENT	10930 FLORISTON AVE
TI83/ ICELAND RD	TRUCKEE, CA 96161-4507
IRUCKEE, CA 96161	
R E & MARTHA MUBRIDE	RACHEL R BECKMAN
OR CURRENT RESIDENT	10849 FLORISTON AVE
108// FLORISTON AVE	TRUCKEE, CA 96161-4513
TRUCKEE, CA 96161-4513	
RICHARD A & SUZANNE TRSTES	
FIGLIETTI	RICHARD H & MARY E TRSTES FEHRT
OR CURRENT RESIDENT	8320 MIDLAND RD
10944 JUNIPER WAY	GRANITE BAY, CA 95746
TRUCKEE, CA 96161-1744	
RICHARD J MCELHINNIE	RICHARD I MCELHINNIF
OR CURRENT RESIDENT	11616 N ALPINE RD
11042 JUNIPER WAY	STOCKTON, CA 95212
TRUCKEE, CA 96161-1751	
RICHARD T & MISTIE D BROWN	RICHARD T & MISTIE D BROWN
OR CURRENT RESIDENT	POB 9422
10928 JUNIPER WAY	TRUCKEE, CA 96162
TRUCKEE, CA 96161-1744	

ROGER WILLIAMS	RONALD D & VIRGINIA S TRSTE LEGG
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10952 JUNIPER WAY	10909 HIRSCHDALE RD
TRUCKEE, CA 96161-1744	TRUCKEE, CA 96161
RONALD D & VIRGINIA S TRSTES LEGG	RONALD D & VIRGINIA S TRSTES LEGG
OR CURRENT RESIDENT	OR CURRENT RESIDENT
10965 FLORISTON AVE	10968 FLORISTON AVE
TRUCKEE, CA 96161-4508	TRUCKEE, CA 96161-4507
KEVIN JOHNSTON 2288 BUENA VISTA AVE LIVERMORE, CA 94550	AT&T (TELEPHONE)
	ATTN: ASTRID WILLARD
	2700 WATT AVE, ROOM 3473-11
	SACRAMENTO, CA 95821
ROGER WILLIAMS 9310 ROCK SPRINGS RD NEWCASTLE, CA 95658	GENE WHITEHOUSE
	IN CARE OF MARCOS GUERRERO – UAIC
	10702 INDIAN HILL ROAD
	AUBURN, CA 95603
RONALD D & VIRGINIA S TRSTES LEGG 1340 PRINCESS AVE RENO, NV 89502	LIBERTY UTIL CALEPCO ELECTRICAL
	ATTN: ANDREW GREGORICH
	933 ELOISE AVE
	SO. LAKE TAHOE, CA 96150

# APPENDIX E – AB-52 LETTERS AND ESA ACTION PLAN
## **APPENDIX F – BRIDGE CROSS SECTIONS**