



INYO COUNTY

Walker Creek Road Bridge Replacement Project

Initial Study/Mitigated Negative Declaration

Federal Project No. BRLO-5948(076)

SCH# 2018111016

FEBRUARY 2019

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ENVIRONMENTAL, INC.

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Prepared for:

Inyo County Public Works Department

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PROJECT INFORMATION

Title: Walker Creek Road Bridge Replacement Project

Location: Inyo County, California

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INTRODUCTION

The Inyo County Department of Public Works (County) has assessed the potential environmental impacts to replace County Bridge 48C0039 and realign Walker Creek Road as it approaches the bridge in either direction. The bridge is located on Walker Creek Road in Inyo County, approximately 1.5 miles south of the census designated place of Olancho, California.

This Mitigated Negative Declaration (MND) has been prepared pursuant to the California Environmental Quality Act (CEQA) based on the assessment presented in the Inyo County Walker Creek Road Bridge Replacement Project Initial Study (IS)(attached).

PROJECT OVERVIEW

The County proposes to construct a new bridge over the Los Angeles Aqueduct approximately 375 feet south of the existing bridge. The new bridge would be a pre-cast, prestressed, voided concrete slab bridge with a composite cast-in-place concrete deck. The existing bridge, which also spans the Los Angeles Aqueduct, would be closed to the public.

The bridge replacement would require realigning Walker Creek Road as it approaches the new bridge in either direction. Approximately 600 to 1,000 feet of roadway on either side would be realigned to meet the new bridge. The project is required to provide safe access between United States Highway 395 (US 395) and destinations west of the Los Angeles Aqueduct, including the Wild Burro Rescue and Preservation Project and recreational destinations in the Inyo National Forest.

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ENVIRONMENTAL DETERMINATION

Summary

The County has prepared an IS (attached) to assess the potential effects of the proposed replacement of County Bridge 48C0039 and realignment of Walker Creek Road on the environment in the project area. The analysis of potential environmental impacts from the proposed project is based on data gathered for this project and other projects within the project vicinity. Additional data were obtained from personal communications and the sources listed in Chapters 3 and 4 of the attached IS.

Based on the analysis presented in the attached IS and the findings listed below, the Lead Agency (Inyo County Public Works) has determined that the proposed project would not have a significant effect on the environment.

- The proposed project would have no impact or a less than significant in the areas of:
 - Aesthetics
 - Agriculture and Forestry Resources
 - Geology and Soils
 - Greenhouse Gas Emissions
 - Hydrology and Water Quality
 - Land Use and Planning
 - Mineral Resources
 - Noise
 - Population and Housing
 - Public Services
 - Recreation
 - Transportation and Traffic
 - Utilities and Service Systems
 - Energy Use
- Potentially significant impacts could occur on the resources listed below. The project would have a less than significant impact on each resource with the incorporation of mitigation measures defined in the IS and this MND.
 - Air Quality
 - Biological Resources
 - Cultural and Tribal Cultural Resources
 - Hazards and Hazardous Materials
 - Mandatory Findings of Significance
- With implementation of the mitigation measures listed below, the proposed project would not significantly degrade the quality of the environment.
- With implementation of the mitigation measures, both short-term and long-term environmental impacts associated with the proposed project would be less than significant.
- When potential impacts associated with implementing the proposed project are considered cumulatively, the incremental contribution of the project-related impacts is insignificant.
- Based on the IS, there is no evidence that implementing the proposed project would have significant impacts on people.


Cathreen Richards, Planning Director

02/05/2019

Date

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Mitigation Measures

Mitigation measures have been identified to reduce potentially significant impacts of the project. Implementation of identified mitigation measures would result in avoiding the impact or reducing it to a less than significant level. The mitigation measures are listed below.

- Mitigation Measure AIR-1: Dust and Engine Emissions Control Measures**
- Construction activities shall comply with District Rule 401 regulations. In addition to reasonable precautions outlined in Rule 401, the following measures shall be incorporated during the installation of the bridge and realigned roadway approaches and the revegetation of the abandoned roadway:
1. Water or dust palliatives shall be applied on dirt roads, material stockpiles, and other surfaces that could give rise to airborne dust and are subject to disturbance.
 2. Water or dust palliatives shall be applied to prevent particulate matter from becoming airborne during the transportation or stockpiling of dusty materials.
 3. Trucks hauling material shall be covered during transit.
 4. Roadways shall be maintained in a clean condition.
 5. Vehicles shall be limited to 15 miles per hour (mph) on unpaved roads, to the extent feasible.
 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).
 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer 's specifications. All equipment shall be checked by a certified visible emissions evaluator.

- Mitigation Measure BIO-1: Special-status Plant Species**
- A pre-construction botanical survey will be conducted for all special-status plant species with potential to occur in the project vicinity. A qualified biologist will conduct the survey during the blooming season (April – July) within one year of construction. If any special-status plant species are observed, the location of the population will be recorded and the following measures will be implemented:

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- Relocate construction staging areas and access roads as necessary to minimize direct impacts
- Fence off areas of the population outside planned construction zones
- Prior to ground disturbance in the areas where special-status plant species populations will be impacted by construction, scrape the top 2 inches of topsoil and stockpile it on site temporarily; after construction is complete, return it to the areas outside the footprint of permanent infrastructure, making sure to spread it 0.8 to 2 inches deep and being careful to avoid compaction of the soil or other disturbance to soil and vegetation.

Mitigation Measure BIO-2: Mojave Desert Tortoise Measures

The following measures shall be implemented during construction to reduce impacts to ~~Mohave~~ Mojave desert tortoise:

- A CDFW- and USFWS-authorized desert tortoise biologist shall conduct pre-construction surveys prior to ground disturbance, within 14 days prior to ground disturbance; these surveys will be performed at a level of intensity similar to a clearance survey that is sufficient to locate any desert tortoise, desert tortoise burrows, or other sign of recent occupancy within the project area; surveys will not involve handling desert tortoises, excavating burrows, or other activities that would constitute take; the purpose of the survey is to ensure no desert tortoise have established in the area since the protocol level surveys and before desert tortoise fence installation. If these surveys locate evidence of recent occupancy, the County should contact CDFW and Caltrans to determine if additional consultation is needed prior to installation of fencing or other commencement of project activities. Caltrans shall be responsible for further consultation with USFWS, as defined through informal consultation with USFWS under Section 7 of the Endangered Species Act.
- If surveys do not identify evidence that work areas are occupied by desert tortoises, USFWS-approved desert tortoise exclusionary fencing will be installed around the perimeter of the project impact area prior to construction start; desert tortoise fencing will be included on the detailed construction plans;
- Vegetation removal shall be minimized and vehicle travel shall be confined to designated routes;
- A qualified biologist will be present during all ground

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disturbing and construction activities to monitor for any desert tortoises that may have been missed during pre-construction surveys or that may have entered work sites through damaged exclusion fencing. The biological monitor shall have the authority to stop work in the event that a desert tortoise is located within the work area. If this occurs, the County will contact CDFW and Caltrans will contact USFWS to determine if additional consultation is needed prior to resuming construction activities.

- All trash and debris shall be disposed of in sealed containers and removed from the site at the end of each day;
- The following “Look Before You Move” on-site protective measures shall be implemented:
 - a. All employees and contractors on the project site shall look under vehicles and equipment for the presence of desert tortoise before moving the vehicle or equipment.
 - b. If a desert tortoise is observed, no vehicles or equipment shall be moved until the animal leaves voluntarily.
 - c. If the animal is located under a vehicle or piece of equipment within the fenced project area, Caltrans will contact the USFWS to determine if additional consultation is required.
 - d. All employees and contractors shall adhere to a “Do Not Touch” policy that applies to all workers on the project; and
 - e. All workers shall be advised that equipment and vehicles must remain within the designated work areas, to be provided and approved by the qualified biological monitor prior to the start of construction.

Mitigation Measure BIO-3: Worker Education Program

The qualified biologist will provide a “Worker Environmental Awareness Training” on the desert tortoise prior to construction start; the training will include:

- Explanation of the avoidance and minimization measures for biological resources and the possible penalties for not adhering to them;
- General safety protocols such as hazardous substance spill prevention and containment measures, fire prevention and protection measures, and speed limits;
- Explanation of the sensitivity and locations of the biological resources within and adjacent to work areas, and proper identification of these resources;

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- Natural history information on the sensitive biological resources including information on physical characteristics, photographs, distribution, behavior, ecology, sensitivity to human activities, legal protection, reporting requirements, and conservation measures required for the project;
- Contact information for the biological monitor(s);
- Notification to all workers to report all observations of special-status species and their sign to the biological monitor;
- A training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and
- Information regarding the effects of predation on the desert tortoise by common ravens and other predators.

Mitigation Measure BIO-4: Weed Control Measures

The following weed control measures shall be implemented during and following construction of the proposed project to reduce the spread of non-native plant species in the project area:

- All native seed mix applied to the site will be from a certified native weed-free seed source;
- All fill materials used for project construction and erosion control will come from a certified weed-free source;
- Tools, equipment, and vehicles will be cleaned of soil and plant material before entering and leaving the worksite;
- Equipment will be washed prior to transportation to the project impact area; and
- Equipment and vehicles will be inspected by the qualified biologist to ensure no weed material is transported to the project impact area.

Mitigation Measure BIO-5: Mojave Desert Tortoise and Mohave Ground Squirrel Habitat Compensation

Habitat quality for both desert tortoise and Mohave ground squirrel is considered low; therefore, temporarily and permanently impacted desert tortoise/Mohave ground squirrel habitat shall be compensated for at a minimum ratio of 3:1 for poor habitat ~~and a maximum ratio of 5:1 for good habitat~~. The ~~1.52~~ 1.23 acres of impacts to potentially suitable desert tortoise and Mohave ground squirrel habitat shall be compensated for through either the purchase of mitigation bank credits, or the purchase of suitable desert tortoise and Mohave ground squirrel habitat to be preserved in perpetuity, or other compensation method as required and approved by CDFW. If it is suitable for both species, any acreage or credits purchased can be combined and serve to compensate for both species. The County shall consult with and, if necessary,

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obtain permits from CDFW and implement all provisions and requirements for tortoise habitat compensation. Should the permit requirements and compensation ratio be different than provided for in this measure, the conditions in the permit shall prevail.

Mitigation Measure BIO-6: Mohave Ground Squirrel Measures

The following measures shall be implemented during construction to reduce impacts on Mohave ground squirrel:

- A qualified biological monitor shall be on site during ground disturbing activities. The name, qualifications, and phone number of the biological monitor shall be provided to a CDFW regional representative at least fourteen (14) days before ground disturbing activities.
- To minimize impacts on Mohave ground squirrel habitat, vegetation removal shall be minimized and vehicle travel shall be confined to designated routes. Cross-country (off-road) vehicle travel shall be prohibited and signs shall be posted to this effect during project construction. If Mohave ground squirrel are encountered, drivers shall stop, wait for the individual(s) to move off the road, and immediately notify the biological monitor of the location where the individual was observed.
- To avoid impacts to Mohave ground squirrel movements or dispersal, the existing Walker Creek Road Bridge shall remain in place and unobstructed to Mohave ground squirrel.
- The approved biological monitor shall inspect all open holes and trenches within the project site at the beginning, middle, and end of each day for trapped animals. To prevent inadvertent entrapment of Mohave ground squirrel or any other animals, the biological monitor shall oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to enter and become entrapped. Escape ramps shall be installed in holes greater than two feet deep that do not hold water or other material, to allow animals to escape. Before holes or trenches are filled, the biological monitor shall thoroughly inspect them for trapped animals. If any worker discovers that Mohave ground squirrel have become trapped, they shall halt project-related activities and notify the biological monitor immediately. Project workers and the biological monitor shall allow the Mohave ground squirrel to escape out of harm's way before allowing work to continue. The use of temporary

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fencing, around the perimeter of trenches or holes is an acceptable minimization measure.

- The biological monitor shall fully excavate by hand all burrows or scope each burrow within the project area that are suspected or known to be occupied by Mohave ground squirrel. The biologist shall allow the Mohave ground squirrel encountered in the excavated burrows during their active period to escape out of harm's way. During the dormant period (September – March), the biologist shall collect and immediately relocate the Mohave ground squirrel to an artificial burrow at a protected off-site location approved in advance by CDFW's regional representative. The covered species may only be relocated by the approved biological monitor. The approved biological monitor shall prepare relocation burrows in the following manner: (1) dig a hole of at least 2 feet deep; (2) install a 9-inch-diameter non-collapsible plastic container, which shall be connected to a 3-inch diameter, corrugated, non-collapsible pipe that runs to the ground surface at a 45-degree angle; (3) the biological monitor shall place the Mohave ground squirrel in the artificial burrow and lightly plug the burrow mouth with soil in a manner that is similar to a natural Mohave ground squirrel burrow.
- Prior to ground disturbing activities, all workers on the project site shall receive training on Mohave ground squirrel ecology, legal protections, and penalties for impacts to Mohave ground squirrel as part of the Worker Environmental Awareness Training (WEAT; refer to Mitigation Measure BIO-3)

Mitigation Measure BIO-7: American Badger and Desert Kit Fox Mitigation and Monitoring Plan

No fewer than 60 days prior to the start of any pre-construction site mobilization, Inyo County shall provide CDFW with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan (plan) for approval. The final plan shall include, but is not limited to, the following procedures and impact avoidance measures:

Pre-Construction Measures

- A preconstruction survey for kit fox or American badger dens shall be conducted by a qualified biologist within 14 days prior to construction commencement. The survey shall include the entire project site and a 20-foot buffer around disturbed areas. If dens are detected each den shall be classified as

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- inactive, potentially active, or definitely active.
- Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox.
- Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance.
- If no tracks are observed in the tracking medium or no photos of the target species are captured after three consecutive nights, the den shall be excavated and backfilled by hand.
- If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den.
- If an active natal den is detected on the site, the CDFW shall be contacted within 24 hours to determine the appropriate course of action to minimize the potential for harm or mortality. The course of action would depend on the age of the pups, location of the den on the site (e.g., is the den in a central area or in a perimeter location), status of the perimeter site fence (completed or not), and the pending construction activities proposed near the den. A no-disturbance buffer will be defined by the qualified biologist, which shall be maintained around active natal dens.

Construction Measures

- All vehicle and equipment shall observe a daytime speed limit of 15-mph. All vehicle and equipment shall observe a night-time speed limit of 10-mph.
- To prevent inadvertent entrapment of badgers, kit foxes, or other animals during construction phase of the proposed project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, thorough inspections for trapped animals shall occur. If at any time a trapped or injured badger or kit

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fox is discovered, CDFW shall be contracted in writing within 24 hours.

- All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for badger or kit fox before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a badger or kit fox is discovered inside a pipe, that section of pipe shall not be moved until CDFW has been consulted.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the construction or project site.
- No firearms shall be allowed on the project site.
- Use of rodenticides and herbicides on or adjacent to the project site shall be restricted. This is necessary to prevent primary or secondary poisoning of badgers or kit foxes and the depletion of prey populations on which they depend. All uses of rodenticides and herbicides should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation. If rodent control must be conducted, zinc phosphide shall be used because of a proven low risk to badger and kit fox.
- A biological monitor shall be appointed by the County who will be the point of contact for any employee or contractor who might inadvertently kill or injure a badger or kit fox or who finds a dead, injured or entrapped badger or kit fox. The biological monitor shall be identified during the employee education program and their name and telephone number shall be provided to CDFW.
- In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape.

Distemper Measures

- The following measures are required to reduce the likelihood of distemper transmission:
 - No pets shall be allowed on the site prior to or during construction, with the possible exception of kit fox scat detection dogs during preconstruction surveys, and then only with prior CDFW approval;

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- Any kit fox hazing activities that include the use of animal repellents such as coyote urine must be cleared through CDFW prior to use; and
- Any documented kit fox mortality shall be reported to CDFW and within 24 hours of identification. If a dead kit fox is observed, it shall be retained and protected from scavengers until CDFW determines if the collection of necropsy samples is justified.

Mitigation Measure BIO-8: Special-Status Bats A preconstruction survey for Pallid bats shall be conducted by a qualified biologist within 14 days prior to construction commencement, and for any roosting bats underneath the existing bridge, if construction work is to occur between April and August.

If roosting bats are observed:

- Work activities shall not occur within 50 feet of the existing bridge. Travel over the bridge would still be permissible as roosts were likely established with baseline noise level from existing vehicle access.
- Lights are not to be used under or in the vicinity of the existing bridge during the roosting season, between April and August.
- Combustion equipment, such as generators, pumps, and vehicles, are not to be parked or engines started under the existing bridge or within 50 feet.

Mitigation Measure BIO-9: Nesting Bird Measures

- If project activities are scheduled to occur between February 1 and September 30, the County shall prepare a Nesting Bird Plan (NBP). The County shall provide CDFW with the opportunity to review and comment on the plan, by providing it no later than 30 days prior to the initiation of construction activities. The NBP will include project-specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with applicable laws related to nesting birds and birds of prey. The NBP shall at a minimum include:
 - Monitoring protocols
 - Survey timing and duration
 - The creation, maintenance, and submittal to CDFW of a bird-nesting log
 - Project-specific avoidance and minimization measures.

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Avoidance and minimization measures shall include, at a minimum: project phasing and timing, monitoring of project-related noise, sound walls and buffers.

- A pre-construction survey for active bird nests shall be conducted in all vegetated areas to be impacted and within 500 feet of the work areas.
- The nesting bird survey shall be conducted by a qualified biologist within 3 days prior to construction start.
- If no nesting or breeding behavior is observed, construction may proceed.
- If an active nest is detected, a determination shall be made by a qualified biologist as to whether construction work shall affect the active nest. If it is determined that construction shall not affect an active nest, work may proceed.
- If it is determined that construction activities are likely to impair the successful rearing of the young, a 'no-disturbance buffer' in the form of orange mesh Environmentally Sensitive Area (ESA) fencing shall be established around occupied nests to prevent destruction of the nest and to prevent disruption of breeding or rearing behavior.
- The extent of the 'no-disturbance buffer' shall be determined by a qualified biologist in consultation with CDFW and shall depend on the level of noise or disturbance, line of sight between the nest and the disturbance area, the type of bird, ambient levels of noise and other disturbances, and other topographic or artificial barriers.
- 'No-disturbance buffers' shall be maintained until the end of the breeding season or until a qualified wildlife biologist has determined that the nestlings have fledged.
- If a nest is discovered by workers on the project site during daily inspections, work shall stop and the biologist shall be called to the site.

Mitigation Measure CUL-1:
Cultural Resources
Sensitivity Training and
Inadvertent Discovery

A professional archaeologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) prior to initiation of site preparation and/or construction, to alert construction workers to the possibility of exposing significant historic and/or prehistoric archaeological resources within the proposed project area. The training shall include a discussion of the types of prehistoric or historic objects that could be exposed and how to recognize them, the need to stop excavation

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at a discovery and within 50 feet of a discovery, and the procedures to follow regarding discovery protection and notification. An “Alert Sheet” shall be posted in staging areas, such as in construction trailers, to alert personnel to the procedures and protocols to follow for the discovery of a potentially significant historic and/or prehistoric archaeological resources.¹

In the event that an archaeological resource is discovered, ground disturbing work shall be halted within 50 feet of the find, and a qualified cultural resources specialist/archaeologist shall be brought to the site. The qualified cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area.

If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within 50 feet of the find, and the qualified cultural resources specialist/archaeologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). If the resource is determined to be prehistoric, the evaluation and determination of appropriate measures shall be coordinated with regional Native American tribes. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources. If preservation-in-place and avoidance is not possible, data recovery shall be undertaken. The

¹ Significant prehistoric cultural resources may include:

- a. Human bone, either isolated or intact burials.
- b. Habitation, occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
- c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
- d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
- e. Isolated prehistoric artifacts (Basin 2015).

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methods and results of data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by the County.

**Mitigation Measure CUL-2:
Paleontological Resources
Sensitivity Training and
Inadvertent Discovery**

A professional paleontologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) to alert construction workers to the possibility of exposing significant paleontological resources within the proposed project area. The training shall be conducted to recognize fossil materials in the event that any are uncovered during construction.

In the event that a paleontological resource is uncovered during project implementation, all ground-disturbing work within a 50-foot radius shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts would occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether it is “unique”² under CEQA, Appendix G, part V. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource

² A unique paleontological resource is any fossil or assemblage of fossils, or paleontological resource site or formation that meets any one of the following criteria:

- Is the best example of its kind locally or regionally;
- Illustrates a paleontological or evolutionary principle (e.g. faunal succession; plant or animal relationships);
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data);
- Encompasses any part of a “type locality” of a fossil or formation;
- Contains a unique or particularly unusual assemblage of fossils;
- Occupies a unique position stratigraphically within a formation; or
- Occupies a unique position, proximally, distally or laterally within a formation’s extent or distribution (County of San Diego, 2009).

MITIGATED NEGATIVE DECLARATION

pursuant to CEQA. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources. If preservation-in-place is not feasible and avoidance is not possible, the fossils shall be recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology (SVP) standard guidelines. Work may commence upon completion of treatment.

Mitigation Measure CUL-3: Human Remains

If human remains are encountered during construction, ground disturbing work shall halt within 50 feet of any area where human remains or suspected human remains are encountered in compliance with California law (Health and Safety Code section 7050.5; PRC sections 5097.94, 5097.98, and 5097.99). The County shall contact the Medical Examiner at the county coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by the County. If the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC).

The NAHC shall immediately notify the identified Most Likely Descendant (MLD), and the MLD has ~~24~~ 48 hours from the time they are granted access to the site to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within ~~24~~ 48 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC shall mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Mitigation Measure HAZ- 1: Fire Prevention Procedures

- Prior to ground disturbing activities, all workers on the project site shall be trained regarding the proper handling and/or storage of materials posing a fire hazard, potential ignition sources (such as cigarettes or sparking equipment), and appropriate types and use of fire protection equipment.

MITIGATED NEGATIVE DECLARATION

- Fire suppression equipment, including fire extinguishers, water, and shovels, shall be available on-site at all times.
- Vehicles shall not be parked in vegetated areas.
- Smoking shall be allowed only in designated areas. The designated areas must be unvegetated. Cigarette butts shall be properly contained and transported off-site for disposal.

1 PROJECT DESCRIPTION

1.1 INTRODUCTION

1.1.1 Project Purpose and Objectives

The Inyo County Public Works Department (County) proposes the Walker Creek Road Bridge Replacement Project (proposed project), which would involve the replacement of County Bridge 48C0039 with a new bridge and would close the existing bridge to public vehicular traffic. The proposed project would also include the realignment of Walker Creek Road as it approaches the bridge in either direction.

The proposed project is needed to improve bridge functionality and public safety. The existing bridge has been evaluated under the Federal Highway Administration's (FHWA) Highway Bridge Program (HBP) and was classified as *functionally obsolete* according to the National Bridge Inspection Standards because of the bridge's width. The bridge is less than 9 feet wide, which is too narrow for some vehicles. The existing bridge also poses several structural and safety concerns. Moderate longitudinal and transverse cracks are found on the deck surface with some map cracking¹. The concrete bridge railings are nonstandard, and the bridge has no approach guardrails. The barrier concrete is showing signs of alkali-silica reactivity. An open (non-sealed) joint is located on one side of the bridge that was repaired at an unknown date. This open joint leaves the superstructure (the deck-supporting structure) susceptible to water damage.

The purpose of the proposed project is to replace the old bridge with a new bridge that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. Highway 395 (U.S. 395) and destinations west of the Los Angeles Aqueduct, including the Wild Burro Rescue and Preservation Project and recreational destinations in the Inyo National Forest.

1.1.2 Project Funding and Jurisdiction

The proposed project would be funded through the Federal HBP. This program is funded by FHWA. The California Department of Transportation (Caltrans) will be the Federal Liaison for administering project funds and providing project oversight. All aspects of the proposed project

¹ A pattern of random fine cracks that occur at the surface of concrete at an early age when the unhardened surface mortar dries out faster than the concrete below.

1 PROJECT DESCRIPTION

would meet state and Federal requirements. Caltrans would approve the National Environmental Policy Act (NEPA) document under current delegation authority from FHWA.

The County is the lead agency under the California Environmental Quality Act (CEQA), with the authority to authorize construction of the proposed project after federal approvals and funding. The County would obtain a right-of-way (ROW) from the Indian Wells Valley Water District (IWWVD) for the realignment of the roadway approach east of the Los Angeles Aqueduct. The County would obtain an encroachment permit from the Los Angeles Department of Water and Power (LADWP) for the realignment of the LADWP patrol roads and for the proposed new bridge that would cross the Los Angeles Aqueduct. These permits would allow a temporary easement for construction and a permanent easement for the bridge and roadway realignment on IWWVD- and LADWP-managed lands.

The proposed project would also require ROW acquisition, rights of entry, and temporary construction easements from private landowners whose property the realigned roadway crosses. The appropriate level of review under NEPA is a Categorical Exclusion (CE). This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared pursuant to CEQA.

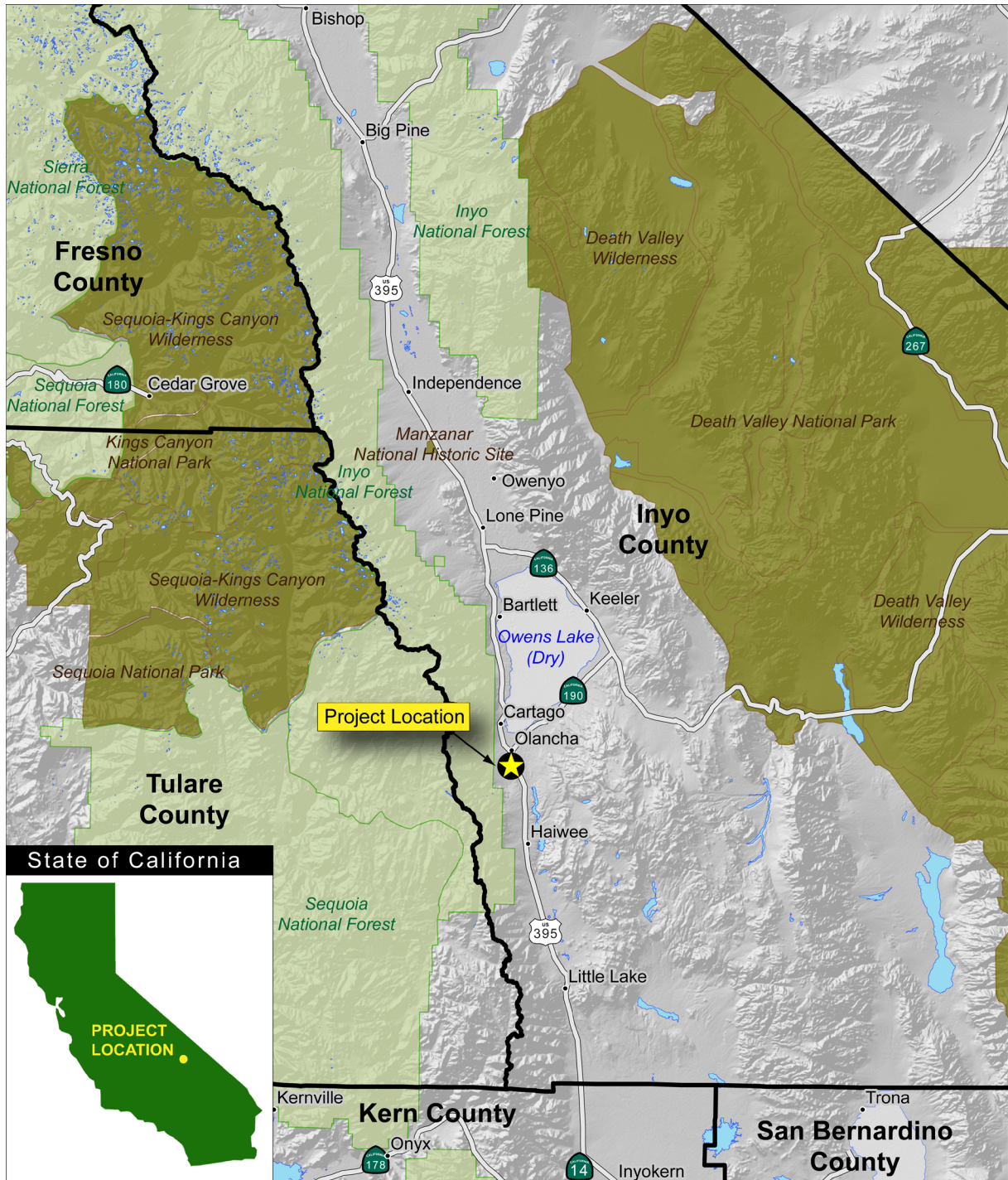
1.1.3 Project Location

The existing bridge is located on Walker Creek Road in Inyo County within the unincorporated community of Olancho, California. Walker Creek Road is a narrow, unpaved road on the eastern side of the Sierra Nevada Mountains, as shown in Figure 1.1-1. The bridge spans the Los Angeles Aqueduct, approximately 0.5 mile west of the intersection of Walker Creek Road with U.S. 395, as shown in Figure 1.1-2.

The existing bridge is located in the Olancho quadrangle (United States Geological Survey), in the NW $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$ of Section 29; NE $\frac{1}{4}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 30; and SW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 20, Township 19 south, Range 37 East, of the Mount Diablo Baseline and Meridian, as shown in Figure 1.1-3.

1 PROJECT DESCRIPTION

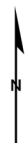
Figure 1.1-1 Project Vicinity



SOURCES: Esri 2013 and Panorama Environmental, Inc. 2013

Scale: 1:1,000,000

LEGEND



Project Location



U.S. Highway



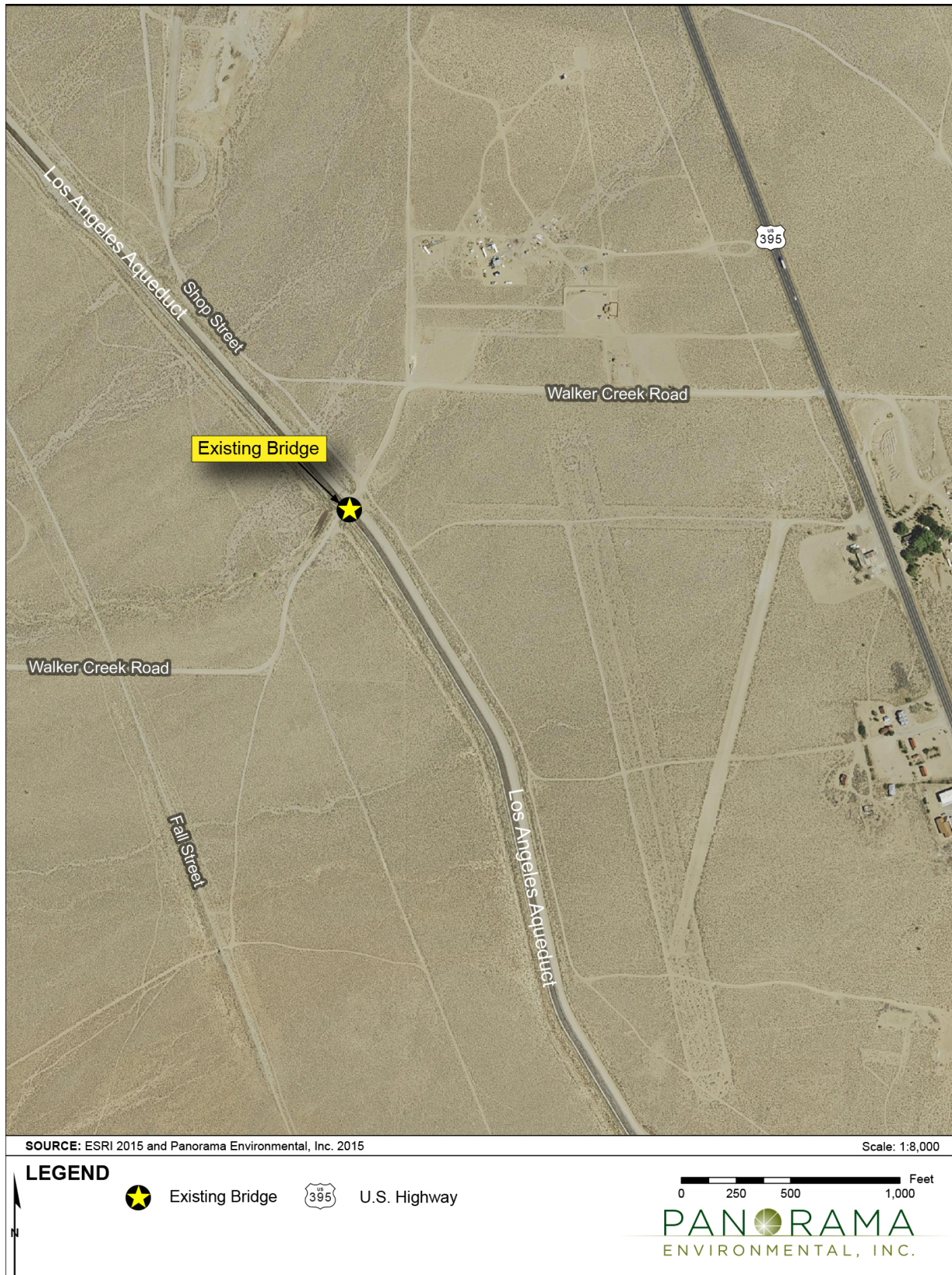
CA State Route

0 15 30 Miles

PANORAMA
ENVIRONMENTAL, INC.

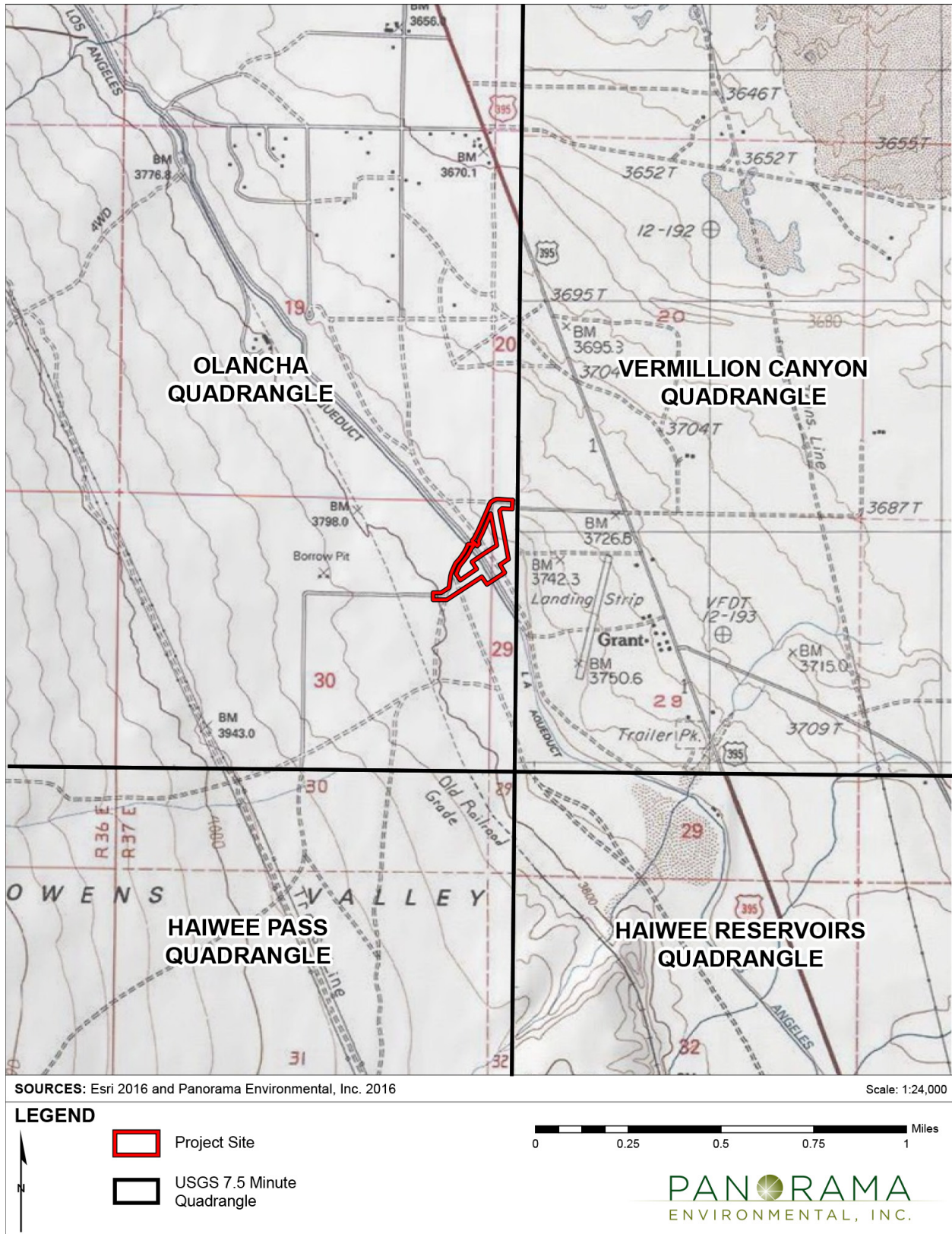
1 PROJECT DESCRIPTION

Figure 1.1-2 Project Vicinity



1 PROJECT DESCRIPTION

Figure 1.1-3 Topographic Map



1 PROJECT DESCRIPTION

1.2 PROJECT DESCRIPTION

1.2.1 Overview

The proposed project would construct a new bridge approximately 375 feet southeast of the existing bridge and realign Walker Creek Road as it approaches the new bridge in either direction. The existing bridge would be left in place and closed to public vehicle traffic after the new bridge and realigned roadway approaches are constructed. Photos of the existing bridge and surroundings are shown in Figure 1.2-1.

This section provides a detailed description of the proposed project, including the design features of the bridge and roadway alignment, and the construction methods. Figure 1.2-2 shows the proposed project, including the existing bridge (to be closed to public traffic), proposed replacement bridge, new roadway approaches, and construction staging area within the project site. Table 1.2-1 lists the footprint and impact areas of the proposed project components.

1.2.2 Project Design

1.2.2.1 Bridge Design

A pre-cast, pre-stressed, voided concrete slab bridge with a composite cast-in-place concrete deck would be installed. The bridge design is shown in Figure 1.2-3. LADWP requires the underside of the proposed bridge to be at least 2 feet higher than that of the existing bridge for clearance over the Los Angeles Aqueduct. The bridge foundation would be constructed on either side of the Los Angeles Aqueduct using spread footings and concrete abutments. Wingwalls would be installed on both sides of the concrete abutments on either side of the Los Angeles Aqueduct. A minimum of 2 feet of clearance would be provided at the front face of the abutments for future maintenance and inspection under the bridge. The deck of the bridge would be approximately 60 feet long and made of concrete. A 10-foot-long concrete approach slab would be used at either side of the bridge to meet seismic design requirements. The bridge would be approximately 32 feet wide, including a 28-foot clear roadway width. An approximately 2-foot-thick Caltrans Type ST-70 concrete curb with steel post and rail bridge railing would be mounted on the bridge deck. Chain link fencing would be attached to the railing to restrict access to the Los Angeles Aqueduct over the sides of the bridge. The steel railing would either be painted or constructed of weathering steel to achieve a rustic look. The bridge would be striped for two lanes.

Approach and transition railing on the southwest approach to the bridge would consist of traditional metal beam and three beam guardrails transitioning onto the bridge rail. Approach and transition railing on both approaches would consist of short attenuators² to reduce interference with the LADWP patrol roads.

² A device intended to reduce the damage to structures, vehicles, and motorists resulting from a motor vehicle collision

1 PROJECT DESCRIPTION

Drainage on the bridge deck would be diverted to overside drains to be installed in each bridge quadrant. Drainage would not be allowed to flow directly off the bridge into the Los Angeles Aqueduct. Runoff would flow into the natural drainage to the east of the Los Angeles Aqueduct and into the LADWP drainage ditch to the west of the Los Angeles Aqueduct.

Table 1.2-1 Project Footprint and Impact Ground Disturbance Areas

Project Components	Footprint (Acres)	Acres of <u>Ground Disturbance Impact</u>
Existing Bridge	0.01	0.00 ¹
Proposed Replacement Bridge	0.05	0.05 (permanent) ²
Realigned Approach Roads	1.24	0.68 (temporary) ⁴ 1.24 (permanent) ⁵
<u>LADWP Patrol Road</u>	<u>0.46</u>	<u>0.46 (permanent)⁶</u>
Restoration of Existing Approach Roads ⁷	0.72 ³	0.72 (temporary)
Construction Staging Areas ⁷	0.32	0.32 (temporary)
Total	<u>2.80</u> 2.34	1.72 (temporary) <u>1.75</u> 1.29 (permanent)

Notes:

- ¹ The existing bridge would remain in place following construction. No impact would occur on the existing bridge.
- ² The proposed replacement bridge would completely span the Los Angeles Aqueduct. The new bridge would not impact the aqueduct.
- ³ Up to 0.72 acres would be restored. Restoration of existing approach roads would depend on land uses and landowner approvals.
- ⁴ Temporary impacts would occur outside of the realigned approach road footprint during construction. Approximately 0.14 acre of the temporary impacts would occur in previously disturbed areas. Approximately 0.54 acre would occur in undisturbed habitat.
- ⁵ Approximately 0.34 acre of the realigned approach road would occur in previously disturbed areas.
- ⁶ Approximately 0.38 acre of the LADWP patrol road segments would occur in previously disturbed areas.
- ⁷ The restoration of existing approach roads and the construction staging areas would occur entirely in previously disturbed areas.

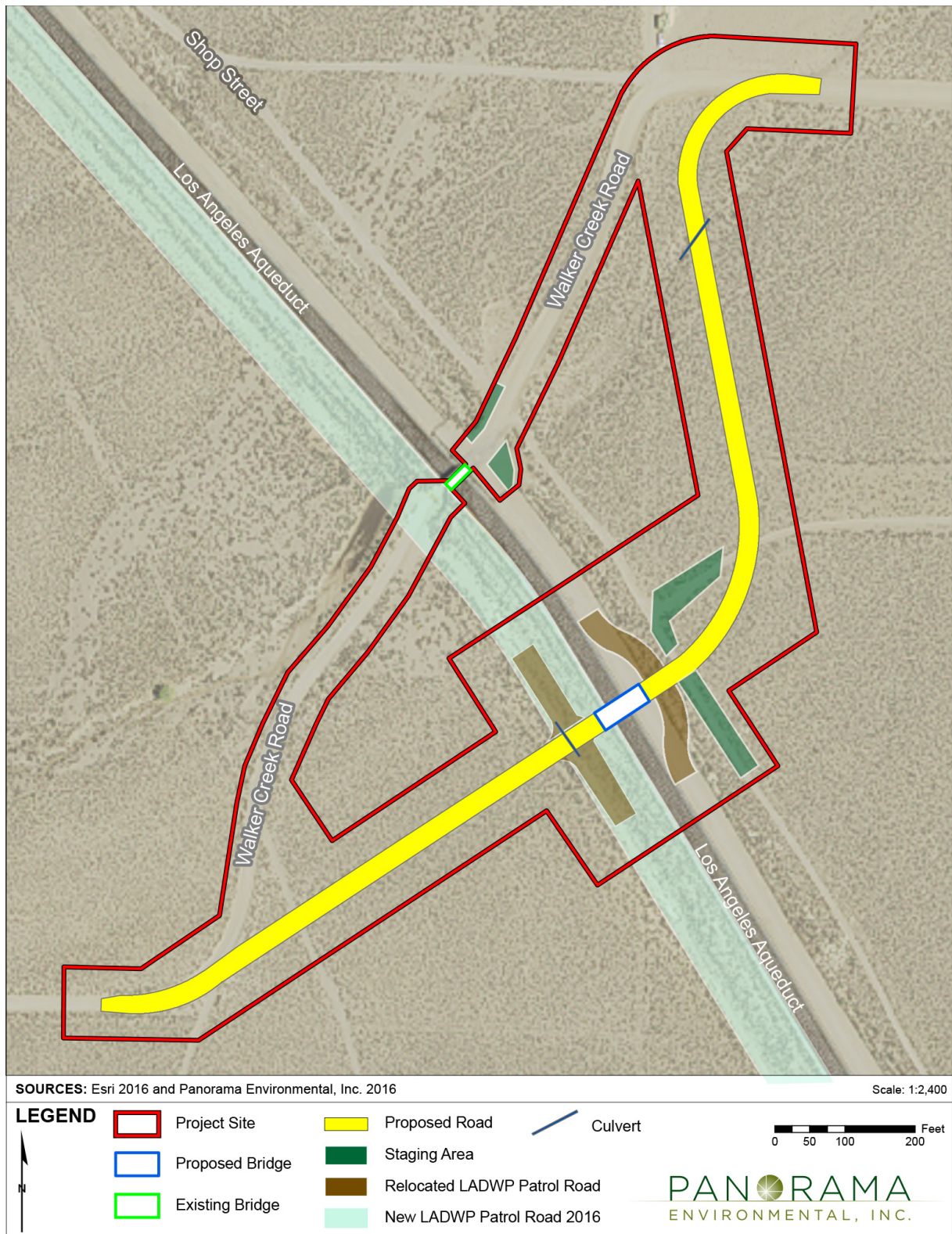
Source: (Inyo County Public of Works, 2017)

1 PROJECT DESCRIPTION

Figure 1.2-1 Existing Conditions

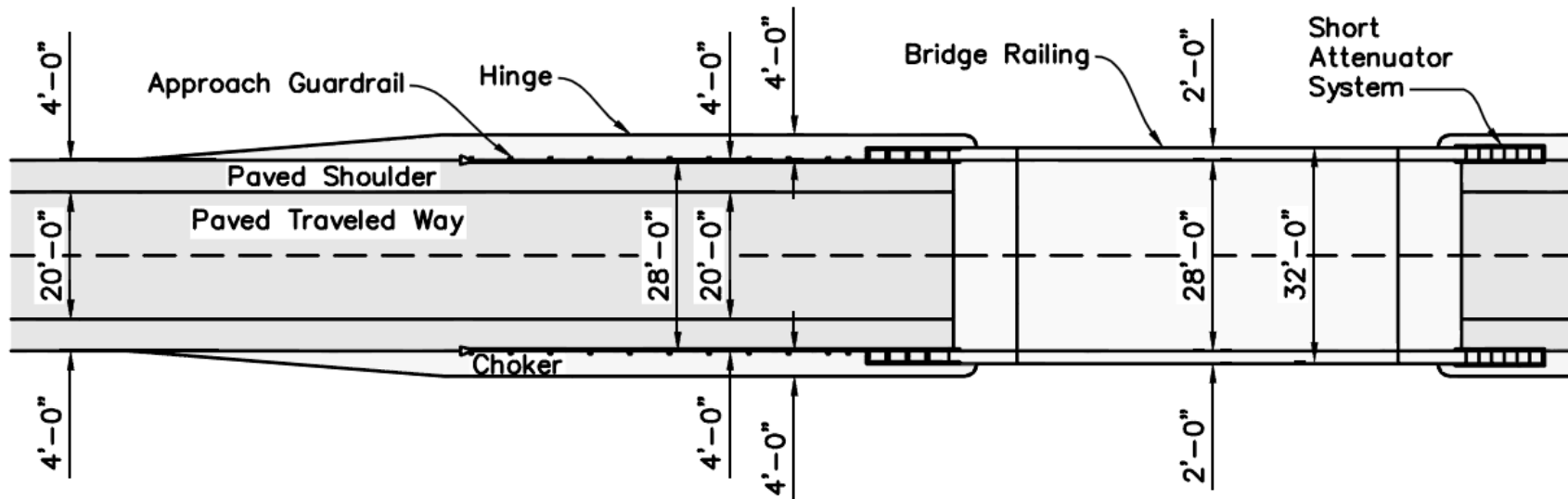


Figure 1.2-2 Project Site



1 PROJECT DESCRIPTION

Figure 1.2-3 Proposed Replacement Bridge Design and Elevation



1 PROJECT DESCRIPTION

1.2.2.2 Roadway Realignment

The bridge would cross the Los Angeles Aqueduct at roughly a 90-degree-angle.

Approximately 600 feet of Walker Creek Road on the southwest side, and 1,000 feet of on the northeast side of the bridge would be realigned. Pipe culverts would be constructed underneath the new roadway approaches on either side of the Los Angeles Aqueduct. The new alignments would transition into the existing road alignments (Figure 1.2-2). The proposed approaches would be 28 feet wide, including two 10-foot-wide lanes and two 4-foot-wide shoulders. This configuration would allow for safe vehicle travel at 30 miles per hour. The roadway approach lanes and shoulders would be paved and striped for approximately 100 feet on the northeast side and 140 feet on the southwest side of the Los Angeles Aqueduct. Vertical clearance requirements of the proposed bridge would place the realigned approach roadway approximately 3 feet higher than existing conditions; therefore, the roadway approaches would have a small grade up to the bridge on either side. The paved portion of the roadway would be surfaced with hot-mix asphalt.

The LADWP patrol roads on the northeast and southwest sides of the Los Angeles Aqueduct would be realigned to accommodate the proposed bridge abutment and terminal railing system. Short attenuator systems would be used to minimize the footprint of the terminal system and the realignment of the patrol roads. The northeast and southwest LADWP patrol roads would need to make two 'S' curves away from the Los Angeles Aqueduct and around the short attenuator systems of the proposed bridge (Figure 1.2-2). The LADWP patrol roads would fit within the existing 125-foot LADWP right-of-way (measured from the center line of the Los Angeles Aqueduct) on the northeast and southwest sides. Concrete aprons would be placed at the intersection of the proposed approach roads and the patrol roads. Access to and through the patrol roads would be designed to accommodate the turning movement of emergency vehicles. Access to the patrol roads would be restricted with chain link fencing. The existing LADWP fencing on the northeast side would be replaced.

The abandoned road segments would be restored to match the natural appearance of the adjacent land. The road segments outside of the LADWP right-of-way would be ripped and recontoured using a bulldozer or grader and then reseeded with certified-weed free native seed. Any rocks or boulders that are unearthed during ripping would be allowed to remain in place to provide a more natural appearance.

1.2.2.3 Closure of Existing Bridge

The existing bridge would be left in place and ownership would be relinquished to LADWP. The bridge would be closed to public traffic and it would serve as an overchute structure for overflow waters from Walker Creek.

A cattle guard is located approximately 20 feet away from the existing bridge on the southwest approach. The cattle guard would be filled in and the chain link fence that borders the LADWP patrol road would be extended to restrict access to the existing bridge.

1 PROJECT DESCRIPTION

1.2.3 Construction

1.2.3.1 Construction Phases

The existing bridge and current roadway alignment would remain open during project construction because it is the only vehicle crossing of the Los Angeles Aqueduct in the general vicinity. Construction of the new bridge would occur in three phases. The first phase would include construction of the new bridge south of the existing bridge. The second phase would include constructing the roadway realignment of Walker Creek Road. The third phase of construction would include closing the existing roadway and routing traffic to use the new bridge.

1.2.3.2 Installation of New Bridge

Excavations for installation of the abutments are expected to be 5 feet deep, 20 feet wide, and 40 feet long as measured from the top of the excavation. Precast bridge slab units and abutments would be utilized. The bridge slabs are typically 3 to 4 feet wide and span the entire width of the bridge. The slabs are placed adjacent to each other and transverse tie rods are used in conjunction with grouted keyways to connect each slab to create a stable bridge.

Bridge slabs would be placed using one crane. The crane would be staged adjacent to the existing road alignment on one side of the Los Angeles Aqueduct. The crane would be staged adjacent to the new road alignment on the east side of the Los Angeles Aqueduct.

The concrete deck would be constructed on top of the bridge slabs using cast-in-place concrete delivered to the site in ready mix trucks. Prior to pouring the concrete, the joints between the slab units would be sealed to ensure that concrete does not seep between the joints or into the Los Angeles Aqueduct.

1.2.3.3 Roadway Realignment

Certified noxious weed free fill material would be imported to create the grade for the roadway approaches to the bridge. Fill slopes would be constructed at an approximate 2:1 (horizontal: vertical) gradient. Fill material would be commercially obtained. The alignment for the new roadway would be graded using bulldozers, scrapers, motor graders, and, where required, other appropriate equipment listed below.

1.2.3.4 Seeding of Existing Walker Creek Road

The existing unpaved Walker Creek Road and graded areas would be ripped and seeded using a native seed mix approved by Caltrans and the existing surface raked. Boulders of various sizes would be placed on the seeded and raked road to match the neighboring areas and deter motorists from using the newly seeded road.

1.2.3.5 Vegetation Removal

Limited vegetation is found in the area and is mostly allscale scrub, rubber rabbitbrush scrub, and basin big sagebrush shrub. Vegetation would be removed to accommodate the proposed roadway realignment. No trees are located on or adjacent to the project site and no trees would be removed.

1 PROJECT DESCRIPTION

1.2.3.6 Existing Utilities

There are no visible overhead utilities or above ground indicators of subsurface utilities on or adjacent to the project site. DigAlert would be contacted at least two full working days before ground disturbance, as required by law.

1.2.3.7 Water Consumption

Project construction would require approximately 10,000 gallons per day of water over the 5-month construction period. Water would be used for dust control, soil compaction, and concrete curing. Water would be obtained from an existing source and trucked to the site daily.

1.2.3.8 Staging Areas

Staging areas would be used to store project materials and equipment as shown in Figure 1.2-2. Staging areas would be surrounded by temporary fencing for safety purposes. Ground disturbance or preparation would not be expected within the staging areas. A large storage container in the staging area would store construction materials during non-work hours. Overnight storage of equipment may also occur within the fenced staging area. Staging areas were sited to allow the LADWP patrol roads to be unimpeded.

1.2.3.9 Traffic Control

Access to the project area would be via Walker Creek Road from U.S. 395. Walker Creek Road is an unpaved road. Construction of the proposed project would not require road closure. Walker Creek Road would remain open at all times during construction, although traffic delays of up to 30 minutes could occur at intermittent intervals during certain construction activities such as placement of precast concrete deck using cranes. Cones and traffic control, such as flaggers, would be used during roadway delays.

1.2.3.10 Personnel, Equipment, and Construction Schedule

The type of equipment required for the proposed project would include, but not be limited to the following:

Crane	Excavators	Chainsaws and weed trimmers
Flatbed trucks	Concrete trucks	Miscellaneous power/hand tools
Front-end loader	Bulldozer	Hot-mix asphalt transfer trucks
Personal trucks and vehicles	Motorgrader	Hot-mix asphalt spreader and roller
Jackhammers	Gradall	Dump trucks
Water truck		

A maximum crew size of 12 workers would be required for the proposed project. Crew members would most likely come from the region, including from California and/or Nevada.

Project construction would likely be performed in the summer of 2020. Construction of the proposed bridge would take approximately 16 weeks (4 months) and roadway realignment would take approximately 3 to 4 weeks, for a total of 20 weeks (5 months). Work would occur during daylight hours, 5 days per week.

1 PROJECT DESCRIPTION

1.3 PERMITTING

The proposed project would require permits and approvals prior to construction. Permits and approvals currently anticipated are listed in Table 1.3-1.

Table 1.3-1 Required Permits and Approvals

Permit or Approval	Agency	Function
Section 2081 Incidental Take Permit	CDFW	Incidental take of Mojave desert tortoise and Mohave ground squirrel pursuant to the California Endangered Species Act
Construction easement/encroachment permit	LADWP	Temporary use of land during construction.
Construction easement/right-of-way	IWVWD	Temporary use of land during construction and permanent use of land for proposed bridge and realigned eastern approach roadway.
Dust Control Permit	Great Basin Unified Air Pollution Control District (GBUAPCD)	Reduce dust from construction activities.
National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)	State Water Resources Control Board (SWRCB)	Reduce erosion of soils and siltation of local waterways during construction activities.

1.4 GENERAL PLAN DESIGNATION

The land uses of the parcels around the project site on the east are designated Rural Estate (RE) and Natural Resources (NR). The parcels around the project site on the west are designated Rural Protection (RP) and NR (Inyo County 2007a). The project site encompasses private land zoned as Open Space (OS) under the Inyo County General Plan (Inyo County 2007b).

2 INITIAL STUDY CHECKLIST

2.1 INTRODUCTION

In compliance with the California Environmental Quality Act (CEQA) Guidelines, the County has prepared an Initial Study (IS) to analyze the environmental impacts of the proposed project. This IS uses Appendix G of the CEQA Guidelines to provide a basis for the analysis of the resource areas addressed. This IS also includes descriptions of the environmental setting to provide context to understand project impacts (or the absence of impacts). An evaluation of potential impacts and mitigation measures to reduce potentially significant impacts is presented in the analysis. The proposed project involves the construction of a new bridge spanning the Los Angeles Aqueduct and realignment of the roadway approaches along Walker Creek Road.

The environmental factors checked below could potentially be affected by this project, but would be mitigated to a less than significant level as indicated on the following pages.

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

2 INITIAL STUDY CHECKLIST

2.2 AESTHETICS

2.2.1 Environmental Setting

2.2.1.1 Visual Character

The project site is located along Walker Creek Road within the unincorporated community of Olancho. The overall visual character of the immediate area is characterized by dominant views of arid mountain ranges surrounding the flat scrubland high desert, and the Los Angeles Aqueduct. The visual character of the project site is characterized by three features.

- **Walker Creek Road.** Walker Creek Road is a generally straight, unpaved roadway with open lines-of-sight. The road provides access to wilderness areas west of the Los Angeles Aqueduct and connects to U.S. 395 south of the town of Olancho. The road crosses the Los Angeles Aqueduct by way of the Walker Creek Road Bridge, a 35-foot-long, 9-foot-wide bridge. A chain-link fence is mounted on the bridge railing.
- **Los Angeles Aqueduct.** The Los Angeles Aqueduct runs from north to south and conveys water to Southern California. The Los Angeles Aqueduct is concrete-lined near the bridge and does not support riparian vegetation. It has a distinctly man-made appearance against the otherwise undeveloped landscape.
- **Walker Creek.** Walker Creek is an ephemeral creek that leads to a detention basin north of Walker Creek Road. A culvert deposits flood waters from the detention basin into the aqueduct, north of Walker Creek Road Bridge. It appears to look like a desert wash amongst the scrub vegetation.

2.2.1.2 Visual Quality

Visual quality is evaluated according to the vividness, intactness, and unity present in the viewshed. Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive patterns. Intactness is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. This factor can be present in well-kept rural landscapes, as well as in natural settings. Unity is the visual coherence and composition harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components of the landscape. High quality views are highly vivid, relatively intact, and exhibit a high degree of visual unity (FHWA, 1983).

The project site is defined by the presence of periodic water in Walker Creek on the west side of the Los Angeles Aqueduct, uniform desert vegetation, and anthropogenic features. The project site is moderately vivid and moderately intact due to the association between the natural features and anthropogenic features. Anthropogenic modifications, such as the Walker Creek Road Bridge, Los Angeles Aqueduct, and chain link fencing, have been on the project site for many decades and, due to the materials and weathering to natural colors, are somewhat unified with the desert landscape. The visual quality of the project site is moderate.

2 INITIAL STUDY CHECKLIST

2.2.1.3 Viewshed

Primary features in the foreground (generally, views within 0.25 mile) include the existing Walker Creek Road, Walker Creek Road Bridge, LADWP access roads, and the Los Angeles Aqueduct. The flat desert landscape dominated by allscale scrub and alluvial fans extending into the valley characterize middleground views (generally, views from 0.25 mile to a few miles away). The Sierra Nevada Mountains to the west, the Coso Range to the east, and the Inyo Mountains to the northeast define the most scenic background views in the area (generally, views at distances greater than a few miles).

2.2.1.4 Viewer Exposure and Sensitivity

Viewer sensitivity is a measure of viewer exposure and viewer awareness. Factors that affect the level of viewer concern are described in Table 2.2-1.

Table 2.2-1 Viewer Sensitivity

Factor	Characteristics for the Project Vicinity
Type of and frequency of use	Daily use from the few motorists, residents, and recreationists on Walker Creek Road
Number of viewers	Low
Adjacent land uses	Water conveyance through Los Angeles Aqueduct Olancho Sculpture Garden

Source: (BLM , 1986)

Walker Creek Road serves predominantly residential and recreational traffic traveling from U.S. 395 west toward the Inyo National Forest. Viewer sensitivity for motorists driving along Walker Creek Road between the Inyo National Forest and U.S. 395 is low due to the low number of viewers and limited area affected by the proposed project and limited visibility of the area from U.S. 395. The existing bridge is not visible from U.S. 395, but is slightly raised above the surrounding grade and becomes increasingly more visible as you approach the Los Angeles Aqueduct.

2.2.1.5 Scenic Routes and Vistas

U.S. 395 was designated the Eastern Sierra Scenic Byway from Topaz in Mono County, north of the project site, to Little Lake in Inyo County, south of the project site, through a Transportation Enhancement Activity Grant. Transportation Enhancement Activity Grants lost funding in 2015. There are no other scenic highway designations or scenic vistas in the project vicinity.

2.2.1.6 Light and Glare

Light pollution is defined as any adverse effect of artificial light, including sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste (FAU, 2016). No streetlights and few significant light sources are located in the immediate vicinity of the project site. Existing sources of light and glare are generally from residences and outbuildings in the unincorporated community of Olancho and from traffic on U.S. 395.

2 INITIAL STUDY CHECKLIST

2.2.2 Environmental Impacts

2.2.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
B) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
C) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
D) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

2.2.2.2 Discussion

A) Would the project have a substantial adverse effect on a scenic vista?

There are no designated scenic vistas within the project vicinity. No views would be blocked or substantially altered. No impacts would occur. Impacts to views from U.S. Highway 395 are discussed under Aesthetics Impact B).

B) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

U.S. 395 was designated the Eastern Sierra Scenic Byway through an FHWA Transportation Enhancement Activity Grant. The existing bridge is not at a substantially greater elevation than the surrounding flat valley. Consequently, intervening scrub and brush block the view of the project site from U.S. 395. Fugitive dust plumes from construction equipment use may be visible to motorists along U.S. 395. Due to the distance between the project site and U.S. 395, the plumes would not substantially detract from the views of the expansive surrounding landscape. The proposed project would not damage any scenic resources within a state scenic highway. No impacts would occur.

C) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Substantial degradation of visual character results from high levels of visual contrast, creating a reduction of intactness and unity, vivid project dominance, or view blockage. Visual contrast relates to space, scale, texture, form, line, and color (BLM, 1986).

2 INITIAL STUDY CHECKLIST

Construction

Construction is anticipated to take approximately 20 weeks. During construction, the following activities and equipment may be seen in the project vicinity and would be readily evident:

- Work crews accessing the project site
- Removal of existing vegetation
- Large pieces of equipment used for moving earth; trenching ditches; transporting, lifting, and placing equipment; hauling concrete; spraying water to control dust; and other construction activities
- Grading activities related to construction of the new road alignment
- Formwork associated with construction of bridge abutments
- Reclamation of the existing Walker Creek Road and areas of temporary disturbance

Construction activities would be limited to daylight hours, 5 days per week. Due to the relatively flat topography in the project vicinity, fugitive dust plumes from construction vehicles and ground-disturbing activities may be temporarily visible to motorists traveling on Walker Creek Road and U.S. 395. Dust plumes may obscure views to the surrounding landscape over a short period of time; however, dust generation would be temporary and limited in extent. The impact would be less than significant.

Operation

Long-term visual change would result from the new precast, concrete Walker Creek Road bridge and realigned roadway. The proposed road alignment would introduce new paved elements. The majority of the old roadway approaches would be reclaimed. The contrast of the new bridge and approach with the existing landscape would be moderate when viewed from the immediate foreground. The viewer sensitivity is low and the visual quality in the area is moderate. The work also would not obstruct or otherwise alter the dramatic middleground and background views. The resulting impact to visual quality from the moderate contrast of the project features with the visual character of the project site would be less than significant.

D) Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Construction would occur during daylight hours. No night lighting would be used. No impacts to nighttime views from lighting would occur.

The steel railing or chain link fencing would be the only material used for the project that would have the potential to result in glare. The railing would be painted or constructed of weathering steel, which dulls with time. The impact from glare would be less than significant.

2 INITIAL STUDY CHECKLIST

2.3 AGRICULTURE AND FORESTRY RESOURCES

2.3.1 Environmental Setting

2.3.1.1 Agricultural Land

No agricultural operations or designated Farmland are located in the vicinity of the project site. Inyo County does not offer Williamson Act contracts for farm and ranch land (Conservation, 2016).

2.3.1.2 Forest Land

No forest land is located on the project site or in the project area. The surrounding vegetation principally consists of low lying shrubs and other plants. The Inyo National Forest is approximately 2 miles to the west of the project site, at the nearest point.

2.3.2 Environmental Impacts

2.3.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Convert Prime Farmland, Unique 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 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 in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in 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 that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2 INITIAL STUDY CHECKLIST

2.3.2.2 Discussion

A) Would the project convert Prime Farmland, Unique 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 nonagricultural use?

No Prime Farmland or Unique Farmland of Statewide Importance is mapped in Inyo County (Conservation, 2016). No impacts would occur.

B) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

No parcels are zoned as agricultural in or near the project site. Parcels near the project site are zoned as open space or rural residential (Inyo County, 2007). Agriculture is a designated permitted use on such parcels, but these parcels have other permitted uses as well and are not limited to only agricultural use. Inyo County does not offer Williamson Act contracts for farm and ranch land (Conservation, 2016). The proposed project would therefore not cause a conflict with any agricultural zoning or under Williamson Act contract. No impacts would occur.

C) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g))?

No zoning for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g)) occurs in the project vicinity. No impacts would occur.

D) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No forest land is found on the project site. Proposed project construction and operation would not result in the loss or conversion of forest land. No impacts would occur.

E) Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?

Construction and operation of the proposed project would not convert agricultural land to non-agricultural use or forest land to non-forest use, as discussed in Impacts A through D above. No impacts would occur.

2 INITIAL STUDY CHECKLIST

2.4 AIR QUALITY

2.4.1 Environmental Setting

2.4.1.1 Air Basin

The project site is located in the Great Basin Valleys Air Basin (GBVAB). Air quality in the region is regulated by the U.S. Environmental Protection Agency (U.S. EPA), the California Air Resources Board (CARB), and the Great Basin Unified Air Pollution Control District (GBUAPCD). The GBUAPCD adopts and enforces regulations to control stationary source emissions in Inyo, Mono, and Alpine Counties.

2.4.1.2 Air Quality

Federal Standards

The U.S. EPA is responsible for setting National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA). National primary standards “provide public health protection, including protecting the health of “sensitive” populations such as asthmatics, children, and the elderly.” National secondary standards “provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings” (U.S. EPA, 2016). The U.S. EPA designations are defined in Table 2.4-1.

State Standards

CARB is the state agency responsible for regulating mobile-source (vehicle) emissions and overseeing the activities of local air pollution control districts. CARB established California Ambient Air Quality Standards (CAAQS) for all federally regulated pollutants in addition to sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The state standards are generally more stringent than the federal standards. Areas have been designated as attainment, nonattainment, or unclassified with respect to state ambient air quality standards under the California Clean Air Act (CCAA). CARB designations are defined in Table 2.4-1.

Table 2.4-1 Air Quality Attainment Designations for Inyo County

Designations	U.S. EPA Definitions Relative to NAAQS	CARB Definitions Relative to CAAQS
Nonattainment	Any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the primary or secondary NAAQS for the pollutant	Any area with one or more violations of the CAAQS one or more times in the last three years
Attainment	Any area that meets the primary or secondary NAAQS for the pollutant	Any area with no violations of the CAAQS in the last three years
Unclassified	Any area that cannot be classified on the basis of available information as meeting or not meeting the primary or secondary NAAQS for the pollutant	Any area with insufficient data for designation

Source: (CARB, 2017; U.S. EPA, 2018)

2 INITIAL STUDY CHECKLIST

Inyo County Attainment

Table 2.4-2 presents a summary of the air quality attainment designations by U.S. EPA and CARB for the GBVAB. The Owens Valley is in nonattainment for federal PM₁₀ standards. Inyo County is in nonattainment for state ozone and PM₁₀ standards.

Table 2.4-2 Air Quality Attainment Designations for Inyo County

Pollutant	Federal Designation	State Designation
Ozone (O ₃) 1-hour standard	–	Unclassified
Ozone (O ₃) 8-hour standard	Unclassified/Attainment	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO ₂)	Unclassified	Attainment
Lead (Pb)	Unclassified/Attainment	Attainment
Respirable Particulate Matter (PM ₁₀)	Nonattainment (Serious) ¹	Nonattainment
Fine Particulate Matter (PM _{2.5})	Unclassified/Attainment	Attainment
Sulfates	–	Attainment
Hydrogen Sulfide (H ₂ S)	–	Attainment
Visibility Reducing Particles	–	Unclassified

¹ Owens Valley

Sources: (CARB, 2017; U.S. EPA, 2018)

Local Standards

The project site is located in the Owens Valley, which is in federal nonattainment for PM₁₀. This area is referred to as the Owens Valley Planning Area (OVPA). A 2016 Owens Valley Planning Area PM₁₀ State Implementation Plan (2016 SIP) was prepared by the GBUAPCD to address how to achieve attainment for PM₁₀. The 2016 SIP contains Best Available Control Measures (BACM) to control dust from Keeler Dunes and Owens Lake, including shallow flooding, managed vegetation, and use of gravel blankets. As stated in the 2016 SIP, in addition to anthropogenic PM₁₀ emissions, GBUAPCD Rules cover industrial sources, forest management burning, and other fugitive dust sources (GBUAPCD, 2016).

Construction-related dust is a significant concern, particularly in the Owens Valley. GBUAPCD Rules 401 and 402 address particulate matter emissions from equipment and construction-related fugitive dust. Rule 401 requires that a person take reasonable precaution to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emissions originate. Rule 402 requires that discharge of air contaminants or other materials from any source should be limited so as to not cause injury, detriment, nuisance, or annoyance to any considerable number of persons (GBUAPCD, 1979).

2 INITIAL STUDY CHECKLIST

2.4.1.3 Sensitive Receptors

The U.S. EPA defines sensitive receptors as locations where the occupants are susceptible to exposure from air pollutants, toxic chemicals, pesticides, and other pollutants. Such locations include hospitals, schools, daycare facilities, elderly housing and convalescent facilities (U.S. EPA, 2016). The GPUAPCD does not set a standard for the distance between the emissions source and sensitive receptors; however, CARB recommends a buffer of 500 feet from the emissions source, and within that buffer a more detailed analysis should occur (CARB, 2005). The nearest sensitive receptor to the project site is a residence over 600 feet northeast of the eastern roadway approach. Nearby residences are located beyond 500 feet from the boundary of the project site.

2.4.2 Thresholds of Significance

GBUAPCD has not developed air quality significance thresholds for construction projects or for explicit use in CEQA analyses. Similar to the GBVAB, the South Coast Air Basin is in state nonattainment for ozone and PM₁₀ as well as federal nonattainment for PM₁₀. The South Coast Air Basin includes all of Orange County and the non-desert regions of Los Angeles County, Riverside County, and San Bernardino County. The South Coast Air Quality Management District (SCAQMD) significance thresholds are prepared to achieve the state and federal standards. Although the sources of pollution and the geographic features influencing air quality are different, the thresholds for SCAQMD were used for this analysis. Use of these thresholds is appropriate due to the similarity in types of air pollutants in nonattainment between the two air basins and the scientific basis researched by SCAQMD for selection of several of the thresholds. Parts of the South Coast Air Basin face worse air quality than in the project area, therefore, the thresholds are likely conservative.

Table 2.4-3 provides the SCAQMD thresholds of significance.

Table 2.4-3 SCAQMD Thresholds of Significance

Pollutant	Maximum Daily Construction Emissions (lbs/day)
NOx	100
VOC	75
PM ₁₀	150
PM _{2.5}	55
SOx	150
CO	550
Lead	3

Source: (SCAQMD, 2015)

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2.4.3 Environmental Impacts

2.4.3.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
B) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
C) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
D) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
E) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

2.4.3.2 Discussion

A) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Construction

The project site is located within the OVPA which is covered by the 2016 SIP. As discussed in the 2016 SIP, the contribution to overall PM₁₀ emissions in the OVPA from construction and demolition activities are insubstantial when compared to the other PM₁₀ emissions sources such as dust from Keeler and Olancho Dunes (GBUAPCD, 2016). As shown in Table 2.4-3, the construction emissions generated by the proposed project would be temporary and would not contribute to the generation of substantial air emissions. The project would not conflict with or obstruct implementation of applicable air quality plans, and this impact would be less than significant.

Operation

After construction, the proposed project would not generate any air quality emissions because the use of the replacement bridge and realigned road would be the same as the existing bridge and road. No impact would occur.

2 INITIAL STUDY CHECKLIST

B) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

Construction of the proposed project would require grading, erection of the bridge, paving, and minor coating activities. Construction activities, particularly during grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Fugitive dust emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. Fugitive dust emissions would also depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Emissions from proposed project construction were estimated using the latest California Emissions Estimator Model (CalEEMod 2016.3.2). Construction would occur over 5 months in 2020. Estimated maximum daily emissions generated during construction of the proposed bridge and roadway approaches are listed in Table 2.4-4.

Table 2.4-4 Unmitigated Proposed Project Maximum Daily Construction Emissions

Pollutant	Construction Emissions (lbs/day)	Construction Thresholds (Based on SCAQMD significance thresholds) (lbs/day)	Exceeds Threshold?
NOx	70.1	100	No
VOC	9.9	75	No
PM ₁₀	11.0	150	No
PM _{2.5}	6.4	55	No
SOx	0.1	150	No
CO	44.1	550	No

Source: (Appendix A, Panorama Environmental 2018)

Criteria air pollutant emissions would not exceed the SCAQMD significance thresholds defined for this project as provided in Table 2.4-4. The impact from criteria air pollutant emissions generated by the proposed project would be less than significant.

Operation

After construction, the proposed project would not generate any air quality emissions because the use of the replacement bridge and realigned road would be the same as for the existing bridge and road. No impact would occur.

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C) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Construction

The project site is in a region designated as nonattainment for ozone and PM₁₀ under state standards and nonattainment for PM₁₀ under federal standards. Combustion-related emissions, some of which are precursors to ozone, would be well below the SCAQMD significance thresholds and would have minimal impact on ambient air quality at the project site or in the region. The project would generate construction-related diesel exhaust and dust that could impact air quality in the region. Fugitive dust would also be generated from use of vehicles and equipment as well as during earth-moving activities. Impacts to air quality from emissions generated during construction would be relatively short; however, the contribution of fugitive dust and ozone precursors to a region in nonattainment would be potentially significant. Mitigation Measure AIR-1 would minimize criteria air pollutant emissions to levels that would be considered less than significant.

Mitigation Measure AIR-1: Dust and Engine Emissions Control Measures

Construction activities shall comply with District Rule 401 regulations. In addition to reasonable precautions outlined in Rule 401, the following measures shall be incorporated during the installation of the bridge and realigned roadway approaches and the revegetation of the abandoned roadway:

1. Water or dust palliatives shall be applied on dirt roads, material stockpiles, and other surfaces that could give rise to airborne dust and are subject to disturbance.
2. Water or dust palliatives shall be applied to prevent particulate matter from becoming airborne during the transportation or stockpiling of dusty materials.
3. Trucks hauling material shall be covered during transit.
4. Roadways shall be maintained in a clean condition.
5. Vehicles shall be limited to 15 miles per hour (mph) on unpaved roads, to the extent feasible.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer 's specifications. All equipment shall be checked by a certified visible emissions evaluator.

Operation

After construction, the proposed project would not increase air quality emissions in comparison to pre-construction conditions because the use of the replacement bridge and realigned road would be the same as for the existing bridge and road. The realigned road segments would be

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paved, which would reduce dust from traffic on Walker Creek Road. Operation of the proposed project would not cause an increase in any criteria air pollutant for which the region is in nonattainment. No impact would occur.

D) Would the project expose sensitive receptors to substantial pollutant concentrations?

The nearest sensitive receptors to the project site are over 600 feet away. Exhaust emissions would disperse rapidly from the project site and would not substantially impact nearby sensitive receptors. The impact would be less than significant.

E) Would the project create objectionable odors affecting a substantial number of people?

No objectionable odors would be generated from project construction activities or from use of the proposed bridge. No impact would occur.

2.5 BIOLOGICAL RESOURCES

2.5.1 Environmental Setting

2.5.1.1 Data Collection

Literature Review

U.S. Fish and Wildlife Service (USFWS) and California Natural Diversity Database (CNDDDB) records were reviewed in 2018 to identify rare and special-status species likely to occur in the project vicinity. Wildlife corridors or wildlife nurseries are not present on the project site or in the project vicinity.

Surveys

Survey Areas

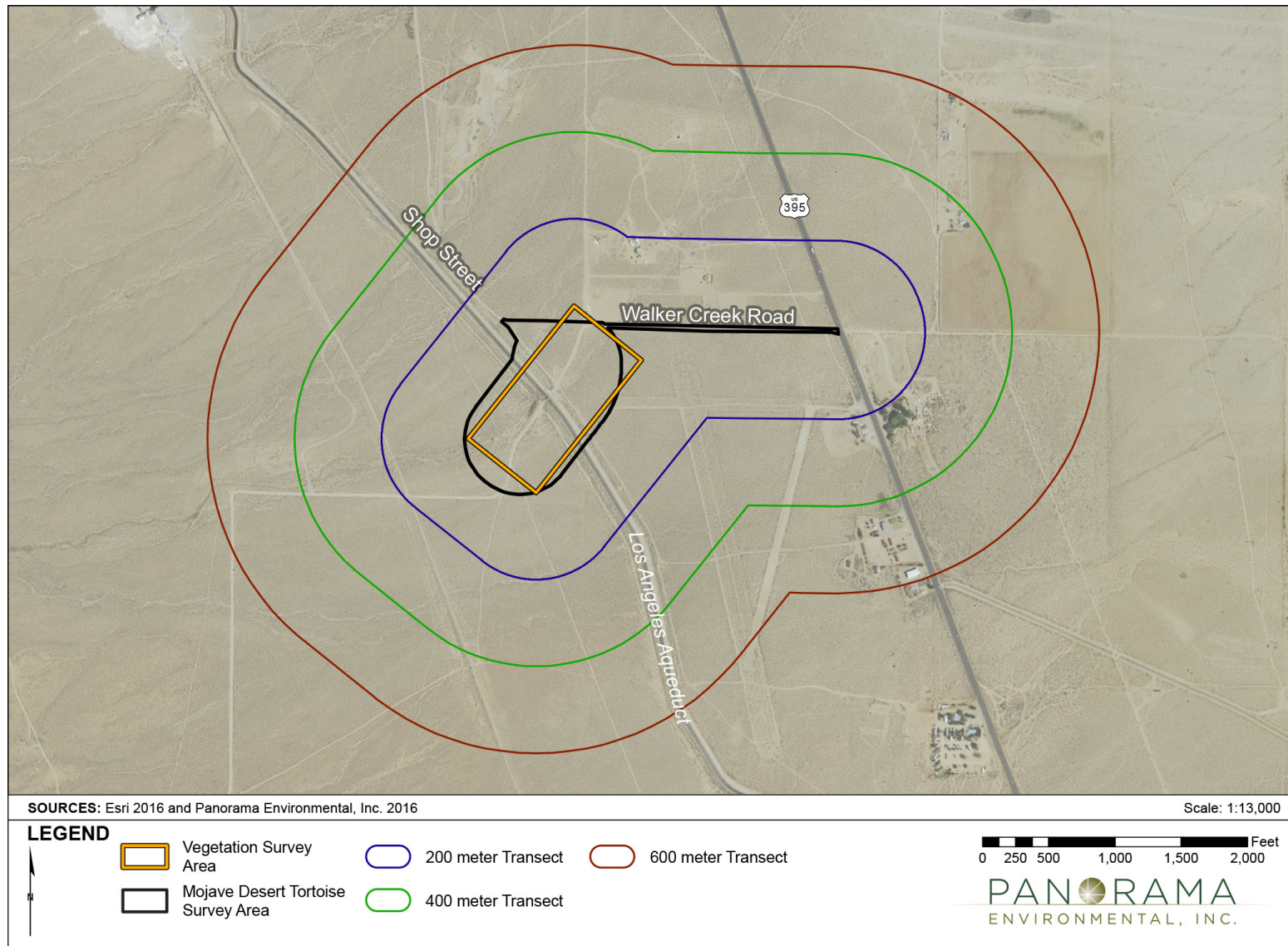
Several biological surveys were conducted. A general reconnaissance survey and vegetation/habitat types survey was conducted covering a 19.2-acre area including the project site. A focused Mojave desert tortoise survey was conducted in accordance with USFWS *Pre-project Field Survey Protocols for Potential Desert Tortoise Habitat* 2010 protocol (USFWS 2010 protocol) covering a 26.2-acre area that encompasses the project site and a 400-foot buffer. The reconnaissance, vegetation, and desert tortoise survey areas are shown in Figure 2.5-1.

Survey Methods

Panorama Biologist, Russell Kokx, conducted a reconnaissance-level field survey on April 27, 2015. He conducted the pedestrian survey within an established survey area (shown in Figure 2.5-1) by walking meandering transects with particular attention to areas more likely to contain special-status species. During the reconnaissance survey, Mr. Kokx evaluated the habitats in the study area for potential to support special-status natural resources identified during the literature review. Mr. Kokx also recorded all wildlife species, or their sign, occurring in the survey area (Caltrans, 2016).

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Figure 2.5-1 Survey Areas



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Botanist/ecologist Catherine Schnurrenberger identified special-status plant species with the potential to occur within the survey area. Reference sites were surveyed for targeted special-status species on April 25 and 26, 2015. Botanical surveys were conducted on the project site on April 26 and 27, 2015. The botanical surveys followed guidelines published by CDFW (2009), USFWS (1996), and CNPS (2001). The botanical surveys were conducted during an appropriate season to detect special-status plants.

A focused Mojave desert tortoise survey was conducted by Russell Kokx on May 30, 2015, in accordance with the current USFWS 2010 protocol (USFWS 2010a). The entire 26-acre survey area was walked using 10-meter-wide belt transects out to approximately 400 feet beyond the area of proposed ground disturbance (as shown in Figure 2.5-1). Surveys of three buffer (zone of influence) transects were completed at 200-meter, 400-meter, and 600-meter intervals from the perimeter of the project site and access route. Along each transect the biologist searched for live desert tortoises and their sign (i.e., burrows, pellets, carcasses, scats, tracks, eggshell fragments, courtship rings, and drinking sites) (Caltrans, 2016).

2.5.1.2 Natural Communities and Sensitive Biological Communities

Natural communities are recurring assemblages of plants and animals found in particular physical environments. Three characteristics distinguish natural communities: 1) plant species composition, 2) vegetation structure (e.g., forest, shrubland, or marsh), and 3) a specific combination of physical conditions (e.g., water, light, nutrient levels, and climate). Three natural communities, as well as disturbed habitat, were identified. The natural communities are described in Table 2.5-1 and are shown in Figure 2.5-2. Disturbed ground is present along the unpaved roads within any road shoulders and in excavated areas. These disturbed areas have some cover by rubber rabbitbrush and annual forbs.

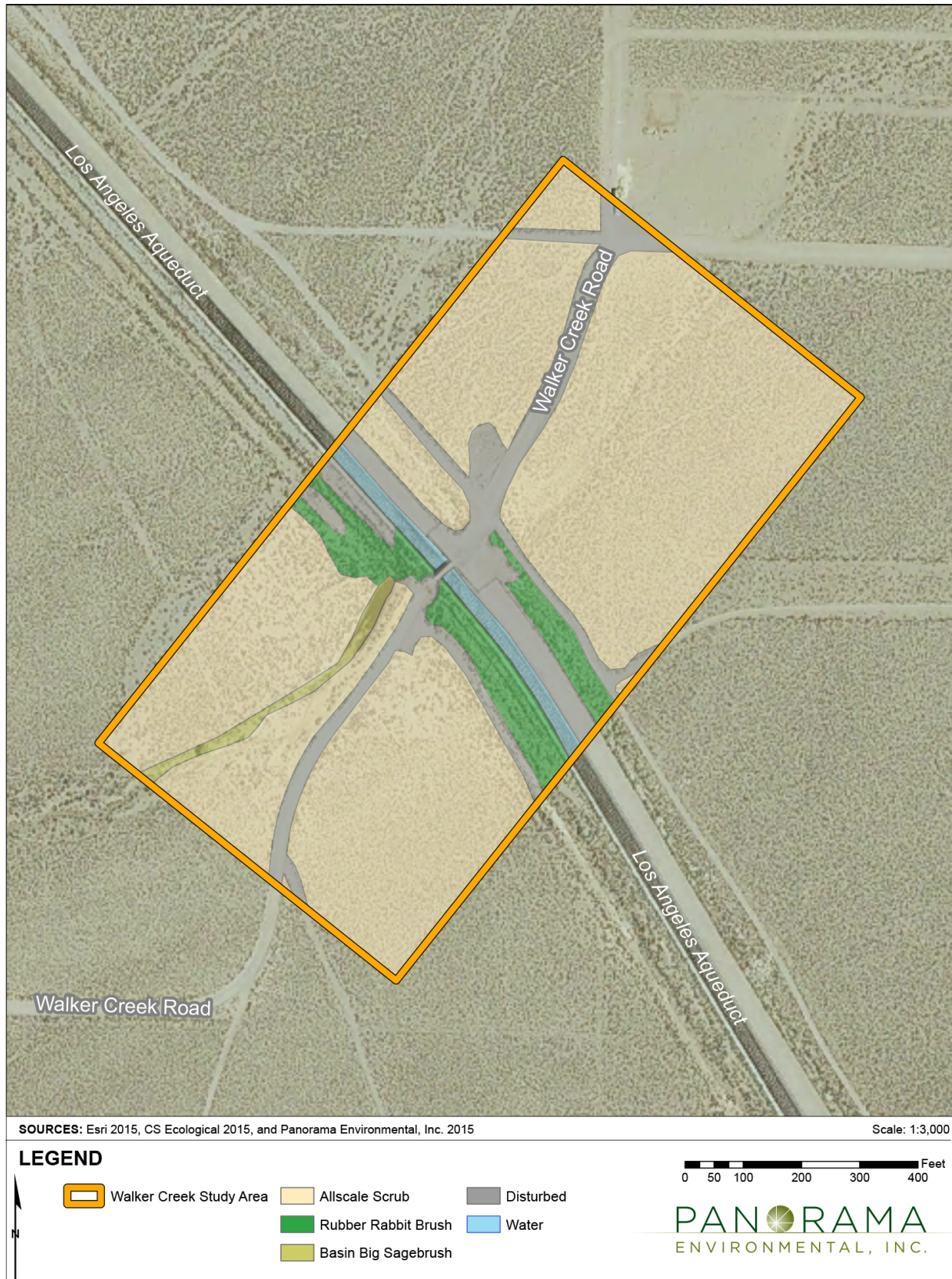
Table 2.5-1 Natural Communities within the Project Vicinity

Feature	Description
Allscale Scrub	Allscale (<i>Atriplex polycarpa</i>) scrub is the dominant vegetation alliance in the survey area (Sawyer et al. 2009). Though allscale is always the dominant shrub within this vegetation alliance, other desert scrub species such as white bursage (<i>Ambrosia dumosa</i>), spiny hopsage (<i>Grayia spinosa</i>), and shadscale (<i>Atriplex confertifolia</i>) are also present.
Rubber Rabbitbrush Scrub	Rubber rabbitbrush (<i>Ericameria nauseosa</i>) scrub occurs in disturbed areas adjacent to the Los Angeles Aqueduct, LADWP patrol road, and dirt roads. These disturbed areas represent a small portion of the survey area. Where rubber rabbitbrush is dominant there is little understory, but other shrubs such as allscale and big sagebrush (<i>Artemisia tridentata</i>) may also be present
Big Sagebrush Shrubland	Big sagebrush shrubland is present within the channel of Walker Creek upstream (west) of the Los Angeles Aqueduct. Total shrub cover is less than twenty percent, but eighty percent of shrubs are big sagebrush and matchweed (<i>Gutierrezia microcephala</i>) comprises the remaining twenty percent. This alliance is only found within the channel/wash of Walker Creek on coarse, sandy soils

Source: (Caltrans, 2016)

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Figure 2.5-2 Natural Communities in the Survey Area



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Sensitive biological communities are defined as those communities that are given special protection under CEQA and other applicable federal, state, and local laws, regulations and ordinances. None of the natural communities in the project area are considered sensitive biological communities.

2.5.1.3 Special-Status Species

Special-Status Plants and Animals

Forty-two special-status or rare plant taxa and 34 special-status wildlife species (two invertebrates, three fish, three amphibians, two reptiles, 12 birds and 12 mammals) are known to occur in the project region based on the results of the previously described literature reviews (Caltrans, 2016). The full list of species with potential to occur on site is included in Appendix B.

One rare plant and nine special-status wildlife species were determined to have moderate to high potential to occur on the project site. Table 2.5-2 describes the status and general habitat description for each special-status species to occur onsite. Species protected by the federal and/or state Endangered Species Act or Fish and Game Code are described further below.

Pine Creek Evening Primrose

Pine Creek evening primrose was observed on site in April 2015 within the allscale scrub vegetation alliance on the east end of the vegetation survey area. Approximately 30 individual plants were observed within the population, which spanned approximately 2 acres.

Pine Creek evening primrose is a rare plant with a California Rare Plant Rank of 4.3, meaning the plant species is somewhat rare in California but is not considered rare outside of California. Pine creek evening primrose is known to occur within Inyo, Lassen, and Modoc counties in California (Schnurrenberger, 2015). Outside California it is found within Nevada where it is not considered a rare plant.

Burrowing Owl

Protocol surveys were not conducted for burrowing owls. No burrowing owl or burrows were observed in the biological study area (BSA) during the reconnaissance-level survey. Suitable habitat exists in the BSA, including sandy soils and ground squirrel burrows. Because no sign of burrowing owl was observed during any survey of the BSA, no impacts to the burrowing owl are anticipated.

Mojave Desert Tortoise

Mojave desert tortoise is a state and federally protected species, listed as threatened under the Endangered Species Act and California Endangered Species Act. The USFWS protocol-level Mojave desert tortoise survey resulted in no detections of this species or their sign in the surveyed area. The project site is located near the western edge of the Western Mojave Recovery Unit in an area where low to moderate desert tortoise densities are expected. Surveys for other projects in the area and historical records of desert tortoise reported in the CNDDDB indicate that tortoise are present in the region in low densities (Caltrans, 2016).

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Table 2.5-2 Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Status	General Habitat Description	Potential to Occur
Plants				
Pine Creek evening primrose	<i>Eremothera boothii</i> ssp. <i>alyssoides</i>	CRPR 4.3	Sandy and gravelly soils within Great Basin scrub at elevations between 600 and 1,700 m.	Present. Known to occur in study area - taxon found during botanical survey. 30 plants observed within the study area during surveys.
Reptiles				
Mojave desert tortoise	<i>Gopherus agassizii</i>	FT ST	Desert scrub, desert washes and Joshua tree woodlands with friable soil for burrow construction.	Moderate potential to occur, suitable habitat is present in the study area and this species is known to occur in the vicinity of the study area in low densities.
Mammals				
American badger	<i>Taxidea taxus</i>	SSC	Open areas with friable soils in variety of habitats including grasslands, shrublands, woodlands, and forests.	Moderate potential to occur in the study area. Suitable habitat and a badger skull were found during surveys; however, no burrows were observed.
Desert kit fox	<i>Vulpes macrotis arsipus</i>	Fur Bearing Mammal	Inhabits sparsely vegetated scrub habitats and native or annual grasslands with abundant rodent populations.	Moderate potential to occur in the study area. Signs of kit fox (subspecies not determined) were observed in the study area.
Mohave ground squirrel	<i>Xerospermophilus mohavensis</i>	ST BLMS	Desert scrub in the Mojave Desert; prefers sandy to gravelly soils.	Moderate potential to occur in the study area. Suitable habitat is located in the study area for this species, which is known to occur to the north and south. Potential burrows were observed during surveys but the burrows could also be from white-tailed antelope ground squirrel.

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Common Name	Scientific Name	Status	General Habitat Description	Potential to Occur
Pallid bat	<i>Antrozous pallidus</i>	SSC BLMS FSS	Wide variety of habitats including grasslands, sagebrush and juniper woodlands, preferably near water. Use narrow crevices in caves, mines, buildings and, less often, rock or debris piles and hollow trees for roosts. They use abandoned buildings, rock overhangs, and bridges for night roosts.	Moderate potential to occur in the study area. Potential roosting habitat could exist under the existing bridge. Potential foraging habitat in the study area.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SCT SSC BLMS FSS	Many habitats including desert scrub, pinyon-juniper and pine forests. Uses caves, abandoned mines, buildings, and tunnels as roosts.	Moderate potential to occur in the study area. No roosting habitat is present in the study area. Potential foraging habitat in the study area.
Yuma myotis	<i>Myotis yumanensis</i>	BLMS	Uses a wide variety of habitats, but closely associated with water. Establish large colonies in buildings, mines, caves and bridges.	Moderate potential to occur in the study area. Roosting habitat could exist under the existing bridge.
Birds				
Loggerhead shrike (nesting)	<i>Lanius ludovicianus</i>	SSC BCC	Open habitats with shrubs and trees for perching and nesting.	Moderate potential to occur and nest in the study area.
Le Conte's thrasher	<i>Toxostoma lecontei</i>	SCC BCC	Desert shrublands, mesquite bosques, and Joshua tree woodlands.	High potential to occur in study area. There is suitable nesting habitat for this species in the study area and they are known to nest north and south of the site.

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Common Name	Scientific Name	Status	General Habitat Description	Potential to Occur
Federal/State Listed: FE Federally listed as endangered FT Federally listed as threatened SE State-listed as endangered ST State-listed as threatened SR State rare				
Other: BCC = USFWS Bird of Conservation Concern FSS = USFS Sensitive BLMS = BLM Sensitive CFP = California Department of Fish and Wildlife Fully Protected Species SSC = California Department of Fish and Wildlife Species of Special Concern WL = California Department of Fish and Wildlife Watch List				
California Rare Plant Ranks: 1B Plants Rare, Threatened, or Endangered in California and Elsewhere 2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere 3 Plants About Which We Need More Information – A Review List 4 Plants of Limited Distribution – A Watch List Source: (Caltrans, 2016; CBD , 2013; Kokx, 2016)				

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Desert tortoise records in the project vicinity include a male tortoise observed foraging along the Los Angeles Aqueduct, about 2 miles north-northwest of the town of Cartago, approximately 6.6 miles north-northwest of the project site (CDFW, 2015) and at least six individuals observed southeast of the junction of Haiwee Reservoir Road and U.S. 395 at the south end of South Haiwee Reservoir, approximately 9 miles southeast of the project site (CDFW, 2015). Mojave desert tortoise surveys conducted in 2012 for the proposed U.S. 395 Olancho/Cartago Four-Lane Project (Four-Lane Project) led by Caltrans resulted in the identification of six older (identified as Class 3 through 5¹) desert tortoise burrows southwest of Olancho and west of the Los Angeles Aqueduct (the closest of these six burrows is approximately 0.75 mile south of the project site); a cluster of more recent and older burrows and scat was also identified just north of Olancho Creek, approximately 2 miles northwest of the project site.

A burrow was observed during the Four-Lane Project surveys near the town of Cartago and two older burrows were observed adjacent to U.S. 395 near Owens Lake (Caltrans, 2013). In April 2016, a desert tortoise was observed north of the unincorporated community of Dunmavin (Moyer, 2016). The desert tortoise was observed approximately 72 feet from its burrow. This sighting occurred approximately 12 miles to the south of the proposed project study area. A live desert tortoise on west of US route 395 was observed in May 2016 (Moyer, 2016). A desert tortoise survey for the Haiwee Clear Recovery Zone Project was conducted in 2012, and a female desert tortoise carcass was observed 262 feet from the US route 395 lane. The female desert tortoise carcass was located approximately 14 miles south of the study area (Caltrans, 2012).

The Biological Assessment (BA) prepared for the Four-Lane Project also references Mojave desert tortoise surveys that were conducted in 2001, which had negative results but included an observation from a local resident of an adult tortoise along Walker Canyon [sic] Road in late February 2001 (Caltrans, 2013). It was assumed at that time that this individual was an escaped pet. Additionally, the BA reported desert tortoise sightings recorded by a Caltrans archaeological survey crew in 2008 of three live tortoises and four potential tortoise burrows along a proposed alternative alignment of U.S. 395 west of the Los Angeles Aqueduct and of four live tortoises recorded by fire crew members from the Ridgecrest BLM Office (Caltrans, 2013).

Because no live desert tortoises or sign of desert tortoise was observed during the protocol survey, they are not expected to reside on the project site; however, there is a moderate likelihood that desert tortoise could travel through the project site during construction, as

¹ Desert tortoise Classes 3 through 5 are defined below:

3. deteriorated condition; this includes collapsed burrows; definitely desert tortoise
4. good condition; possibly desert tortoise
5. deteriorated condition; this includes collapsed burrows; possibly desert tortoise

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suitable habitat is present and this species has been observed in the vicinity (Caltrans, 2016). The County and Caltrans conducted informal consultation with USFWS under Section 7 of the Endangered Species Act. USFWS determined that the project is not likely to adversely affect desert tortoise with the implementation of conservation measures identified by USFWS. The conservation measures recommended by USFWS have been incorporated into mitigation measures required for the proposed project.

Mohave Ground Squirrel

Mohave ground squirrel is a state protected species, listed as threatened under California Endangered Species Act. It is endemic to the western Mojave Desert, and typically found in creosote bush scrub. It prefers deep sandy or gravelly soil and will avoid rocky areas, suitable substrates for burrows are essential to assist with thermo-regulation. The proposed project is within the core Olancho population area (Leitner 2009).

Focused protocol-level Mohave ground squirrel surveys were not conducted for the proposed project. The biologist observed burrows in the project area, but it was not evident if the burrows were inhabited by Mohave ground squirrel or white-tailed antelope ground squirrel. Although Mohave ground squirrel were not observed during any of the biological surveys for the project, the site presents appropriate habitat for the species and is within the known range of the species. The site is not within a Mohave ground squirrel conservation area or in an area designated as critical habitat.

Protocol-level surveys conducted for the Caltrans Four-Lane Project were conducted in 2001 and 2002 within 1 mile of the proposed project. No Mohave ground squirrel were trapped in 2001; however, trapping surveys in April and May of 2002 yielded a total of 4 and 3 individuals, respectively. Consultation with CDFW suggests that Mohave ground squirrel have been observed near Haiwee Reservoir (2.9 miles from the proposed project) and as close as the Munro Valley Solar Project site, located 0.4 mile northeast of the proposed project (Banks, 2018). It is assumed that Mohave ground squirrel inhabit the project region and have moderate potential to occur on site.

Migratory Birds

Migratory birds are generally not protected under the federal Endangered Species Act (FESA), but most are protected under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA decreed that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected under federal law. Executive Order 13186 (Land Bird Strategic Allotment, January 11, 2001), placed additional emphasis on conservation and management of migratory birds.

Migratory bird species that are known to occur, or that may occur, in the project area include:

- Le Conte's thrasher
- Loggerhead shrike
- Turkey vulture
- Lesser nighthawk
- Common raven
- Say's phoebe
- Cliff swallow
- Horned lark
- Black-throated sparrow
- Sagebrush sparrow

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2.5.2 Environmental Impacts

2.5.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the 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, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
C) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
D) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
E) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
F) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

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2.5.2.2 Discussion

A) Would the project 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 the U.S. Fish and Wildlife Service?

Special-Status Plants

Most special-status plants with the potential to occur in the vicinity were not observed during the surveys conducted during the blooming period, and are therefore, presumed to be absent. The one exception was the Pine Creek evening primrose, which was observed during the surveys. This plant is CRPR-listed, with a rank of 4.3. Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California. The 0.3 rank denotes that the plant is not very threatened in California (less than 20 percent of occurrences are threatened or there is a low degree and immediacy of threat or no current threats are known). Loss of several individual plants of this species would not be considered a significant impact because such a loss would not threaten the overall population or viability of this species. Impacts would be considered significant if the entire population in the project vicinity was removed.

Construction of the proposed project could damage or destroy individuals within the on-site population of Pine Creek evening primrose during grading and use of equipment and vehicles. Thirty individuals were mapped within the areas surveyed. The population is clustered around the area where the new road segment would be constructed. Ground disturbing activities such as grading and operation of heavy equipment have the potential to damage or crush the Pine Creek evening primrose plants within the project area. Mitigation Measure BIO-1 would reduce impacts to the Pine Creek evening primrose by requiring a pre-construction survey, fencing, and topsoil reclamation. No other special-status plant species are known to occur on the project site. The impact to special-status plants from construction and operation of the proposed project would be less than significant.

Mitigation Measure BIO-1: Special-status Plant Species

A pre-construction botanical survey will be conducted for all special-status plant species with potential to occur in the project vicinity. A qualified biologist will conduct the survey during the blooming season (April – July) within one year of construction. If any special-status plant species are observed, the location of the population will be recorded and the following measures will be implemented:

- Relocate construction staging areas and access roads as necessary to minimize direct impacts
- Fence off areas of the population outside planned construction zones
- Prior to ground disturbance in the areas where special-status plant species populations will be impacted by road or bridge construction, scrape the top 2 inches of topsoil and stockpile it on site temporarily; after construction is complete, return it to areas outside the footprint of permanent infrastructure, making sure to spread

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it 0.8 to 2 inches deep and being careful to avoid compaction of the soil or other disturbance to soil and vegetation.

Special-Status Animals

Reptiles

Desert tortoise has a moderate potential to travel through the project site although habitat quality is considered low due to the previous grazing and the homogenous scrub. Desert tortoise prefer more diverse and less dense vegetation (Kokx, 2016). Construction activities have the potential to directly and indirectly impact desert tortoise. Indirect effects could include reduction and/or degradation of foraging habitat; direct effects could include impacts to tortoise movement and/or dispersal (from construction of new roadway approaches), temporary displacement, an increase in predation from predators attracted to the construction area, injury from construction equipment and vehicles or death from burrow collapse due to grading or construction equipment traveling over a burrow. Impacts to desert tortoise habitat are included in Table 2.5-3.

Table 2.5-3 Project Footprint and Habitat Impact Areas

Project Components	Footprint (Acres)	Temporary Habitat Disturbance (Acres)	Permanent Habitat Disturbance (Acres)	Total Habitat Disturbance (Acres)
Existing Bridge	0.01 ^a	0.00	0.00	0.00
Proposed Replacement Bridge	0.05 ^b	0.00	0.00	0.00
Realigned Approach Roads ^c	1.24	0.54	0.9	1.44
LADWP Patrol Road	0.46	0.00	0.08	0.08
Restoration of Existing Approach Roads	0.72 ^d	0.00	0.00	0.00
Construction Staging Areas	0.32 ^e	0.00	0.00	0.00
Total	2.80	0.54	0.98	1.52

Notes:

^a The existing bridge would remain in place following construction. No impact would occur on the existing bridge.

^b The proposed replacement bridge would completely span the Los Angeles Aqueduct. The new bridge would not impact the aqueduct. Bridge footings would be located in previously disturbed areas and would not result in the loss of habitat.

^c Temporary impacts would occur outside of the realigned approach road footprint during construction. A portion of the realigned approach road would overlap with the existing Walker Creek Road; therefore, the footprint area is larger than the permanent habitat disturbance area.

^d Up to 0.72 acre would be restored. Restoration of existing approach roads would depend on land uses and landowner approvals. Restoration of existing roads would not result in habitat loss.

^e Staging areas are located in previously disturbed areas and would not result in habitat loss.

Source: (Inyo County Public of Works, 2017).

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Approximately 0.98 ~~1.08~~ acres of suitable habitat for the desert tortoise would be permanently impacted as a result of the proposed project and an additional 0.54 ~~0.15~~ acre of suitable habitat would be temporarily² impacted during project construction. In total, 1.52 ~~1.23~~ acres of desert tortoise habitat would be directly impacted by the proposed project.

These direct and indirect impacts would be potentially significant due to the limited distribution and number of desert tortoise throughout the range. Mitigation Measures BIO-2 through BIO-4 require a pre-construction survey prior to ground disturbance activities, an on-site biological monitor, desert tortoise fencing during construction, worker training, and noxious weed management. Mitigation Measure BIO-5 requires compensatory habitat mitigation by the County as required by CDFW. Direct and indirect impacts to desert tortoise would be less than significant with mitigation.

Mitigation Measure BIO-2: Mojave Desert Tortoise Measures

The following measures shall be implemented during construction to reduce impacts to ~~Mohave~~ Mojave desert tortoise:

- A CDFW- and USFWS-authorized desert tortoise biologist shall conduct pre-construction surveys prior to ground disturbance, within 14 days prior to ground disturbance; these surveys will be performed at a level of intensity similar to a clearance survey that is sufficient to locate any desert tortoise, desert tortoise burrows, or other sign of recent occupancy within the project area; surveys will not involve handling desert tortoises, excavating burrows, or other activities that would constitute take, the purpose of the survey is to ensure no desert tortoise have established in the area since the protocol level surveys and before desert tortoise fence installation. If these surveys locate evidence of recent occupancy, the County should contact CDFW and Caltrans to determine if additional consultation is needed prior to installation of fencing or other commencement of project activities. Caltrans shall be responsible for further consultation with USFWS, as defined through informal consultation with USFWS under Section 7 of the Endangered Species Act.
- If surveys do not identify evidence that work areas are occupied by desert tortoises, USFWS-approved desert tortoise exclusionary fencing will be installed around the perimeter of the project impact area prior to construction start; desert tortoise fencing will be included on the detailed construction plans;

² Full reestablishment of vegetation after disturbance in the Mojave and Sonoran Desert is estimated to occur, on average, within 76 years (Abella, 2010). Due to the slow recovery of desert communities, temporary impacts are treated like permanent impacts.

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- Vegetation removal shall be minimized and vehicle travel shall be confined to designated routes;
- A qualified biologist will be present during all ground disturbing and construction activities to monitor for any desert tortoises that may have been missed during pre-construction surveys or that may have entered work sites through damaged exclusion fencing. The biological monitor shall have the authority to stop work in the event that a desert tortoise is located within the work area. If this occurs, the County will contact CDFW and Caltrans will contact USFWS to determine if additional consultation is needed prior to resuming construction activities.
- All trash and debris shall be disposed of in sealed containers and removed from the site at the end of each day;
- The following “Look Before You Move” on-site protective measures shall be implemented:
 - a. All employees and contractors on the project site shall look under vehicles and equipment for the presence of desert tortoise before moving the vehicle or equipment.
 - b. If a desert tortoise is observed, no vehicles or equipment shall be moved until the animal leaves voluntarily.
 - c. If the animal is located under a vehicle or piece of equipment within the fenced project area, Caltrans will contact the USFWS to determine if additional consultation is required.
 - d. All employees and contractors shall adhere to a “Do Not Touch” policy that applies to all workers on the project; and
 - e. All workers shall be advised that equipment and vehicles must remain within the designated work areas, to be provided and approved by the qualified biological monitor prior to the start of construction.

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Mitigation Measure BIO-3: Worker Education Program

The qualified biologist will provide a “Worker Environmental Awareness Training” on the desert tortoise prior to construction start; the training will include:

- Explanation of the avoidance and minimization measures for biological resources and the possible penalties for not adhering to them;
- General safety protocols such as hazardous substance spill prevention and containment measures, fire prevention and protection measures, and speed limits;
- Explanation of the sensitivity and locations of the biological resources within and adjacent to work areas, and proper identification of these resources;
- Natural history information on the sensitive biological resources including information on physical characteristics, photographs, distribution, behavior, ecology, sensitivity to human activities, legal protection, reporting requirements, and conservation measures required for the project;
- Contact information for the biological monitor(s);
- Notification to all workers to report all observations of special-status species and their sign to the biological monitor;
- A training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and
- Information regarding the effects of predation on the desert tortoise by common ravens and other predators.

Mitigation Measure BIO-4: Weed Control Measures

The following weed control measures shall be implemented during and following construction of the proposed project to reduce the spread of non-native plant species in the project area:

- All native seed mix applied to the site will be from a certified native weed-free seed source;
- All fill materials used for project construction and erosion control will come from a certified weed-free source;
- Tools, equipment, and vehicles will be cleaned of soil and plant material before entering and leaving the worksite;
- Equipment will be washed prior to transportation to the project impact area; and
- Equipment and vehicles will be inspected by the qualified biologist to ensure no weed material is transported to the project impact area.

Mitigation Measure BIO-5: Mojave Desert Tortoise and Mohave Ground Squirrel Habitat Compensation

Habitat quality for both desert tortoise and Mohave ground squirrel is considered low; therefore, temporarily and permanently impacted desert tortoise/Mohave ground squirrel habitat shall be compensated for at a minimum ratio of 3:1 for poor habitat. The 1.52 ~~1.23~~ acres of impacts to potentially suitable desert tortoise and Mohave ground

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squirrel habitat shall be compensated through either the purchase of mitigation bank credits, or the purchase of suitable desert tortoise and Mohave ground squirrel habitat to be preserved in perpetuity, or other compensation method as required and approved by CDFW. If it is suitable for both species, any acreage or credits purchased can be combined and serve to compensate for both species. The County shall consult with and, if necessary, obtain permits from CDFW and implement all provisions and requirements for tortoise habitat compensation. Should the permit requirements and compensation ratio be different than provided for in this measure, the conditions in the permit shall prevail.

Mammals

Mohave Ground Squirrel. Mohave ground squirrel has a moderate potential to occur on the project site. Construction of the proposed project has the potential to directly and indirectly impact Mohave ground squirrel. Direct effects would occur during ground disturbing activities and use of the staging areas which could eliminate or degrade up to 1.52 ~~4.23~~ acres of foraging and burrowing habitat for Mohave ground squirrel, although habitat quality is low due to poor shrub diversity. Indirect effects could include reduction and/or degradation of habitat and direct effects could include destruction of burrow complexes, disruption of movement corridors, temporary displacement, injury, or death. Implementation of the proposed project would result in a potentially significant direct and indirect impact. Mitigation Measure BIO-3 requires a pre-construction survey for potential burrows and a biological monitor to monitor ground-disturbing activities. Project construction would not proceed in areas containing suitable habitat for Mohave ground squirrel until an ITP from CDFW has been issued. Mitigation Measure BIO-5, requiring habitat compensation for the loss of 1.52 ~~4.23~~ acres of habitat, and Mitigation Measure BIO-6 requiring avoidance and minimization measures to be implemented during construction. The impact to Mohave ground squirrel would be less than significant with mitigation.

Mitigation Measure BIO-6: Mohave Ground Squirrel Measures

The following measures shall be implemented during construction to reduce impacts on Mohave ground squirrel:

- A qualified biological monitor shall be on site during ground disturbing activities. The name, qualifications, and phone number of the biological monitor shall be provided to a CDFW regional representative at least fourteen (14) days before ground disturbing activities.
- To minimize impacts on Mohave ground squirrel habitat, vegetation removal shall be minimized and vehicle travel shall be confined to designated routes. Cross-country (off-road) vehicle travel shall be prohibited and signs shall be posted to this effect during project construction. If Mohave ground squirrel are encountered, drivers shall stop, wait for the individual(s) to move off the road, and

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immediately notify the biological monitor of the location where the individual was observed.

- To avoid impacts to Mohave ground squirrel movements or dispersal, the existing Walker Creek Road Bridge shall remain in place and unobstructed to Mohave ground squirrel.
- The approved biological monitor shall inspect all open holes and trenches within the project site at the beginning, middle, and end of each day for trapped animals. To prevent inadvertent entrapment of Mohave ground squirrel or any other animals, the biological monitor shall oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to enter and become entrapped. Escape ramps shall be installed in holes greater than two feet deep that do not hold water or other material, to allow animals to escape. Before holes or trenches are filled, the biological monitor shall thoroughly inspect them for trapped animals. If any worker discovers that Mohave ground squirrel have become trapped, they shall halt project-related activities and notify the biological monitor immediately. Project workers and the biological monitor shall allow the Mohave ground squirrel to escape out of harm's way before allowing work to continue. The use of temporary fencing, around the perimeter of trenches or holes is an acceptable minimization measure.
- The biological monitor shall fully excavate by hand all burrows or scope each burrow within the project area that are suspected or known to be occupied by Mohave ground squirrel. The biologist shall allow the Mohave ground squirrel encountered in the excavated burrows during their active period to escape out of harm's way. During the dormant period (September – March), the biologist shall collect and immediately relocate the Mohave ground squirrel to an artificial burrow at a protected off-site location approved in advance by CDFW's regional representative. The covered species may only be relocated by the approved biological monitor. The approved biological monitor shall prepare relocation burrows in the following manner: (1) dig a hole of at least 2 feet deep; (2) install a 9-inch-diameter non-collapsible plastic container, which shall be connected to a 3-inch diameter, corrugated, non-collapsible pipe that runs to the ground surface at a 45-degree angle; (3) the biological monitor shall place the Mohave ground squirrel in the artificial burrow and lightly plug the burrow mouth with soil in a manner that is similar to a natural Mohave ground squirrel burrow.
- Prior to ground disturbing activities, all workers on the project site shall receive training on Mohave ground squirrel ecology, legal protections, and penalties for impacts to Mohave ground squirrel as part of the Worker Environmental Awareness Training (WEAT; refer to Mitigation Measure BIO-3)

American Badger. American badgers have a moderate potential to occur on the project site. Signs of American badger were detected during project surveys. Proposed project grading and

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earth disturbing activities could result in impacts to dens of American badger if an individual were to occur on the project site during construction. A natal den could be present on the project site if the proposed project were constructed during the breeding season. The potential impact to an active or natal den of American badger would be a significant impact to badgers. Mitigation Measure BIO-7 requires preparation and implementation of an American Badger and Desert Kit Fox Mitigation and Monitoring Plan which would include conducting pre-construction surveys, monitoring of any observed dens to determine activities, and implementing a variety of construction measures to prevent entrapment and injury. The impact to American badgers from project construction would be less than significant with mitigation.

Mitigation Measure BIO-7: American Badger and Desert Kit Fox Mitigation and Monitoring Plan

No fewer than 60 days prior to the start of any pre-construction site mobilization, Inyo County shall provide CDFW with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan (plan) for approval. The final plan shall include, but is not limited to, the following procedures and impact avoidance measures:

Pre-Construction Measures

- A preconstruction survey for kit fox or American badger dens shall be conducted by a qualified biologist within 14 days prior to construction commencement. The survey shall include the entire project site and a 20-foot buffer around disturbed areas. If dens are detected each den shall be classified as inactive, potentially active, or definitely active.
- Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox.
- Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance.
- If no tracks are observed in the tracking medium or no photos of the target species are captured after three consecutive nights, the den shall be excavated and backfilled by hand.
- If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den.
- If an active natal den is detected on the site, the CDFW shall be contacted within 24 hours to determine the appropriate course of action to minimize the potential for harm or mortality. The course of action would depend on the age of the pups, location of the den on the site (e.g., is the den in a central area or in a perimeter location), status of the perimeter site fence (completed or not), and the pending

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construction activities proposed near the den. A no-disturbance buffer will be defined by the qualified biologist, which shall be maintained around active natal dens.

Construction Measures

- All vehicle and equipment shall observe a daytime speed limit of 15-mph. All vehicle and equipment shall observe a night-time speed limit of 10-mph.
- To prevent inadvertent entrapment of badgers, kit foxes, or other animals during construction phase of the proposed project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, thorough inspections for trapped animals shall occur. If at any time a trapped or injured badger or kit fox is discovered, CDFW shall be contracted in writing within 24 hours.
- All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for badger or kit fox before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a badger or kit fox is discovered inside a pipe, that section of pipe shall not be moved until CDFW has been consulted.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the construction or project site.
- No firearms shall be allowed on the project site.
- Use of rodenticides and herbicides on or adjacent to the project site shall be restricted. This is necessary to prevent primary or secondary poisoning of badgers or kit foxes and the depletion of prey populations on which they depend. All uses of rodenticides and herbicides should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation. If rodent control must be conducted, zinc phosphide shall be used because of a proven low risk to badger and kit fox.
- A biological monitor shall be appointed by the County who will be the point of contact for any employee or contractor who might inadvertently kill or injure a badger or kit fox or who finds a dead, injured or entrapped badger or kit fox. The biological monitor shall be identified during the employee education program and their name and telephone number shall be provided to CDFW.
- In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape.

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Distemper Measures

- The following measures are required to reduce the likelihood of distemper transmission:
 - No pets shall be allowed on the site prior to or during construction, with the possible exception of kit fox scat detection dogs during preconstruction surveys, and then only with prior CDFW approval;
 - Any kit fox hazing activities that include the use of animal repellents such as coyote urine must be cleared through CDFW prior to use; and
 - Any documented kit fox mortality shall be reported to CDFW and within 24 hours of identification. If a dead kit fox is observed, it shall be retained and protected from scavengers until CDFW determines if the collection of necropsy samples is justified.

Implementation of the proposed project could also result in the loss of 1.52 ~~1.23~~ acres of foraging habitat for American badger; however, foraging habitat is common in the area and the species is not critically threatened or endangered. The loss of foraging habitat would not be considered a significant impact.

Desert Kit Fox. Desert kit fox has a moderate potential to occur on the project site. The project site is within the known range of the desert kit fox and signs of kit fox were observed within the project site. Construction of the proposed project has the potential to eliminate or degrade foraging habitat, disturb or destroy active burrows, disrupt movement corridors, temporarily displace, injure, or kill desert kit fox. Impacts from construction of the proposed project would be potentially significant. Mitigation Measure BIO-7 requires preparation and implementation of an American Badger and Desert Kit Fox Mitigation and Monitoring Plan which would include conducting pre-construction surveys, monitoring any observed dens to determine activities, and implementing a variety of construction measures to prevent entrapment and injury. With the implementation of Mitigation Measure BIO-7 the impact to desert kit fox from construction of the proposed would be less than significant with mitigation.

The project could permanently eliminate or degrade up to 1.52 ~~1.23~~ acres of foraging habitat for desert kit fox. Given the abundance of similar habitat in the region, impacts to 1.52 ~~1.23~~ acres would be less than significant.

Bats. Pallid bat, Townsend's big-eared bat, and Yuma myotis, have the potential to forage on and adjacent to the project site. The project would not result in the loss of a significant amount of foraging habitat such that any of these bat species could be impacted. Bats forage at night, and so they would not be at risk of injury or death from construction equipment or activities, which operates during the day. Impacts bat foraging would be less than significant.

Pallid bat and Yuma myotis also have the potential to roost under the existing bridge. Roosting sites are an important limiting resource for bats. Yuma myotis is very tolerant of human disturbances and can be found in urbanized environments (Heady, 2005). As such, Yuma myotis is unlikely to be disturbed by traffic and equipment noises associated with construction

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of the proposed project. Human disturbance at roost sites is considered to be a factor for the decline of bat populations including Pallid bat (ICF, 2012). Traffic noise, loud ultrasonic noises, and sudden extremely loud noises can result in roost abandonment. Roost abandonment can reduce survivability of individuals from increased predation, and reduced quality of thermal and social environments (Caltrans, 2016). Pallid bat populations are in decline (ICF, 2012). As such, the loss of even a few individuals in a colony would be considered a potentially significant impact.

The existing bridge would remain in place. Construction vehicles would cross the existing bridge and travel along the LADWP patrol road, approximately 15 feet east of the Los Angeles Aqueduct. Noise from use of vehicles and equipment have the potential to disturb bats that could be using the existing bridge for roosting, resulting in abandonment of the roost and potential mortality of individuals. Construction impacts to roosting Pallid bats from traffic and equipment noise would be potentially significant due to the potential for roost abandonment. Mitigation Measure BIO-8 requires surveys for roosting bats if construction work were to occur during the roosting season, between April and August, and avoidance of any observed roosts. The impact to special-status bats would be less than significant with mitigation.

Mitigation Measure BIO-8: Special-Status Bats

A preconstruction survey for Pallid bats shall be conducted by a qualified biologist at within 14 days prior to construction commencement, and for any roosting bats underneath the existing bridge, if construction work is to occur between April and August.

If roosting bats are observed:

- Work activities shall not occur within 50 feet of the existing bridge. Travel over the bridge would still be permissible as roosts were likely established with baseline noise level from existing vehicle access.
- Lights are not to be used under or in the vicinity of the existing bridge during the roosting season, between April and August.
- Combustion equipment, such as generators, pumps, and vehicles, are not to be parked or engines started under the existing bridge or within 50 feet.

Birds

Loggerhead shrike and Le Conte's thrasher have a moderate to high potential to nest on or adjacent to the project site. Migratory birds protected under the Migratory Bird Treaty Act also have a potential to nest on or adjacent to the project site. Construction activities have the potential to impact special-status bird species and migratory birds through habitat loss or degradation of habitat during vegetation removal. There is the potential for disturbance or disruption of nesting activities and nest failure as a result of construction vehicle noise. Injury or death of individuals of these species could occur from construction equipment or vehicle use. The impact to special-status bird species, specifically loggerhead shrikes and Le Conte's thrashers, as well as nesting birds would be potentially significant. Mitigation Measure BIO-9

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requires nesting bird surveys prior to construction and continued surveys if nests or nesting birds are observed. The impact to special-status bird species and nesting birds would be less than significant with mitigation.

Mitigation Measure BIO-9: Nesting Bird Measures

- If project activities are scheduled to occur between February 1 and September 30, the County shall prepare a Nesting Bird Plan (NBP). The County shall provide CDFW with the opportunity to review and comment on the plan, by providing it no later than 30 days prior to the initiation of construction activities. The NBP will include project-specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with applicable laws related to nesting birds and birds of prey. The NBP shall at a minimum include:
 - Monitoring protocols
 - Survey timing and duration
 - The creation, maintenance, and submittal to CDFW of a bird-nesting log
 - Project-specific avoidance and minimization measures. Avoidance and minimization measures shall include, at a minimum: project phasing and timing, monitoring of project-related noise, sound walls and buffers.
- A pre-construction survey for active bird nests shall be conducted in all vegetated areas to be impacted and within 500 feet of the work areas.
- The nesting bird survey shall be conducted by a qualified biologist within 3 days prior to construction start.
- If no nesting or breeding behavior is observed, construction may proceed.
- If an active nest is detected, a determination shall be made by a qualified biologist as to whether construction work shall affect the active nest. If it is determined that construction shall not affect an active nest, work may proceed.
- If it is determined that construction activities are likely to impair the successful rearing of the young, a 'no-disturbance buffer' in the form of orange mesh Environmentally Sensitive Area (ESA) fencing shall be established around occupied nests to prevent destruction of the nest and to prevent disruption of breeding or rearing behavior.
- The extent of the 'no-disturbance buffer' shall be determined by a qualified biologist in consultation with CDFW and shall depend on the level of noise or disturbance, line of sight between the nest and the disturbance area, the type of bird, ambient levels of noise and other disturbances, and other topographic or artificial barriers.
- 'No-disturbance buffers' shall be maintained until the end of the breeding season or until a qualified wildlife biologist has determined that the nestlings have fledged.
- If a nest is discovered by workers on the project site during daily inspections, work shall stop and the biologist shall be called to the site.

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B) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

The natural communities observed on the project site during the surveys are not identified as sensitive by any agency (Caltrans, 2016). The Los Angeles Aqueduct transects the project site. The Los Angeles Aqueduct is a concrete-lined, manmade aquatic feature with no associated riparian habitat. The existing road would be reclaimed and reseeded with native seed to minimize impacts on native habitats. The proposed project would have no impacts on riparian habitat or sensitive natural communities.

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

Wetlands were not observed on the project site during surveys (Caltrans, 2016). The Los Angeles Aqueduct and Walker Creek are the only aquatic features in the vicinity. The proposed project would span the Los Angeles Aqueduct and would not include work within the channel. The proposed project would have no impact to wetlands.

D) Would the project 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 existing bridge would be left in place to serve as an over chute structure for overflow water and as a wildlife crossing. The proposed roadway approaches would be paved and a replacement bridge installed to the southeast of the existing bridge. Wildlife could easily move across the proposed roadway approaches and the proposed project would not interfere with wildlife movement because the proposed project would not increase traffic along the road. Additionally, the existing bridge would be left in place to serve as an additional land-dwelling wildlife crossing. The impact on wildlife movement would be less than significant.

No established migratory wildlife corridors are found on the project site, nor are native wildlife nursery sites found on the project site or in the vicinity. The proposed project would have no impact on a migratory wildlife corridor or a native wildlife nursery site.

E) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, apply to the proposed project. The proposed project would have no impact.

F) Would the project 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 proposed project is not located within an area covered by an adopted habitat conservation plan or natural community conservation plan. The proposed project would have no impact.

2.6 CULTURAL RESOURCES

2.6.1 Environmental Setting

Prehistory

Previous archaeological research indicates that prehistoric people inhabited eastern California from 11,000 years before present (BP) (late Pleistocene) until approximately 150 years BP, when the Europeans made contact (Holocene). Significant changes and improvements in projectile technology, pottery, diet, and settlement strategies occurred over this time period.

Early occupation sites, from the early Holocene, have been identified based on the presence of fluted-base projectile points. Many of these early discoveries were made in the southern deserts including Owens Lake.

The Middle Holocene was an extremely arid time period. Projectile points bearing weak shoulders and indented or splitstem bases, including gracile split-stem points exemplify the Middle Holocene period. Other projectiles identified during this time include the Pinto points and flaked stone assemblages.

The living conditions for populations during the Late Holocene improved and led to population growth and technological innovations. During the Late Holocene the diet of populations diversified to include more low-return or labor-intensive foodstuffs as a result of new technology or by the adjustment of plant collection and processing techniques. Trade increased during the Late Holocene, allowing groups to access resources that may have been otherwise unavailable due to geography or cultural barriers (ASM, 2016).

Ethnography

The Owens Valley Paiute inhabited the Owens Valley and surrounding uplands. Most ethnographic accounts place the northern boundary of Owens Valley Paiute territory just north of Bishop, at the edge of the Volcanic Tableland, with the southern boundary somewhere south of Owens Lake. The activities of the native populations were related to the flora and fauna, topography, climate, and distribution of water sources (ASM, 2016).

Regional History

Americans traveling west did not initially settle in the eastern Sierra, but many had to pass through the area on their way to central and southern California. As a result, the Inyo-Mono region was frequently visited by passing settlers. By 1845, Owens Valley became an occasionally used emigrant trail, providing a route into California that avoided crossing the high Sierras (ASM, 2016)

Mining and cattle ranching drove settlers to Owens Valley. Silver mining occurred in Owens and Panamint valleys in the late 1850s and early 1860s. Notable locations where silver was mined are the Potosi Mining District near Lone Pine and Union Mine at Cerro Gordo. Cerro Gordo was the most productive U.S. silver mine in 1868. Salt was mined in Saline Valley east of Independence (Inyo County , 2015).

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Records Search

Records Search Results

A records search for the proposed project was conducted at the California Historical Resources Information System Eastern Information Center (EIC). The EIC records search was performed on May 26, 2015, by staff from ASM Affiliates. The records search identified 69 sites within the Area of Potential Effect (APE)³ and 1 mile around the APE. Previously recorded sites included prehistoric flaked stone scatter and historic refuse, building pads, and camps.

Two sites were located within the APE; 1) the Los Angeles Aqueduct and 2) a segment of old Highway 23 and the stage road predecessor, as shown in Table 2.6-1. The Los Angeles Aqueduct was identified as “eligible” under the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). The old Highway 23 was identified as “not eligible” under NRHP and CRHR.

Table 2.6-1 Previously Recorded Sites within the APE

Primary Number	Trinomial Designation	Description	Eligibility (NRHP / CRHR)
P-14-4591	CA-INY-4591H	The Los Angeles Aqueduct; Manzanar Irrigation System.	Eligible
P-14-0102295	CA-INY-7816	Linear Features (Highway 23 and Stage Road Segments)	Not Eligible

Source: ASM 2016

Los Angeles Aqueduct

The previously recorded Los Angeles Aqueduct (CA-INY-4591H) encompasses the Alabama Gates and Spillway, the location of the 1926 Los Angeles Aqueduct bombing, concrete-lined open canal, pump houses, piping, and various bridges and other features associated with the Los Angeles Aqueduct in the region. The Los Angeles Aqueduct has previously been recommended eligible for listing in the National Register of Historic Places (NRHP) under Criteria A and C with a period of significance from 1907-1940. The Los Angeles Aqueduct is associated with historic events (Criterion A), such as the development of the City of Los Angeles; transformation of the Owens Valley landscape, economy, and community; as well as advances in hydraulic engineering. Master engineer, William Mulholland, designed the Los Angeles Aqueduct with its system of pipes, tunnels, and hydraulics (Criterion C). Additionally, the Los Angeles Aqueduct is a contributing element of the First Los Angeles Aqueduct Archaeological District (FLAAAD) under Criteria A, B, and C. ASM concurs with previous recommendations and recommends that the segment of the Los Angeles Aqueduct transecting

³ The APE is defined to cover the entire project site shown in Figure 1.2-2.

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the APE is eligible for listing with the NRHP under Criteria A and C (ASM 2016). The Walker Creek Road Bridge was previously recorded as a feature of the Los Angeles Aqueduct.

Highway 23

The previously recorded segment of the old Highway 23 and its stage road predecessor is a part of a major north-south route on the west side of Owens Valley that connected settlements, ranch houses, lakes, and springs in the late nineteenth and early twentieth century. This roadway segment was recommended as not eligible for listing on the NRHP or CRHR as it does not retain sufficient integrity to meet NRHP criteria. ASM concurs with the previous finding of not eligible for listing in the NRHP or CRHR (ASM 2016).

2.6.1.1 Field Survey and Subsurface Testing

An architectural and archaeological resources inventory within and adjacent to the APE was conducted on December 8 and 9, 2015, and Extended Phase I testing, including eight Shovel Test Pits (STP), was conducted between March 1 and 2, 2016. During the architectural and archaeological resources inventory five cultural resources were identified as shown in Table 2.6-2. The STPs were conducted in and around on resource, identified as W-ME-05. One of the STPs within W-ME-05 yielded obsidian flakes.

Table 2.6-2 Newly Identified Cultural Resources within the APE

Age	ID	Description	Recommended Eligibility (NRHP/ CRHR)
Historic	W-ME-01	A series of five refuse dumps mostly from the mid-1930s to mid-1950s with some earlier specimens	Not Eligible
Historic/ Prehistoric	W-ME-05	A small, prehistoric flaked stone scatter with a few historic cans	Not Eligible
Historic	W-ME-02	Walker Creek Road, a roughly east-west trending bladed, dirt road	Exempt ¹
Historic	W-ME-04	A northwest-southeast single lane, bladed road; two refuse concentrations/dumps	Not Eligible
Historic	W-ME-06	a single lane, unimproved dirt road that trends roughly north/northeast by south/southwest	Not Eligible

¹ Exempt: The site has been altered so as to appear less than 30 years old.

Source: ASM 2016

The cultural resources identified within the APE are all recommended as exempt or not eligible for inclusion in the NRHP or CRHR. W-ME-01 is not eligible because the resources cannot be associated with any historic event or important historic person, do not contain any architectural remains, and do not provide any important information for understanding of settlement in the region. W-ME-02 is exempt because Walker Creek Road has been realigned, widened, and continuously maintained since establishment in, or prior to, 1947. W-ME-04 and W-ME-06 are not eligible because the resources cannot be associated with any historic event or important historic person, is not a quality example representative of a particular time period, and does not

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provide any important information to identified historic research themes. W-ME-05 does not provide any important information to the two research themes, chronology and lithic technology. The obsidian flakes found qualify as sparse lithic scatter, rather an eligible resource.

ASM also re-examined the eligibility of the Walker Creek Road Bridge as part of this project review. The existing bridge is a Local Agency bridge that is a single lane wide for two-way traffic that was constructed in 1927 and is a Category 4 Bridge. The existing bridge is a simple, cast-in-place concrete bridge that does not possess high artistic or architectural merit, and is not part of the original design as engineered by William Mulholland. As such, the Walker Creek Road Bridge does not appear to contribute to the NRHP or CRHR eligibility of the Los Angeles Aqueduct as a whole, nor would it be considered individually eligible to the NRHP or CRHR under any Criteria. Further, the Walker Creek Road Bridge is recommended as not contributing to the eligibility of the FLAAAD (ASM, 2016).

Isolated finds were considered any surface distribution of less than 10 artifacts in proximity to each other. Six isolated finds were recorded in the APE. The isolated finds generally consisted of obsidian flakes. Isolated finds are considered exempt from inclusion in the NRHP (ASM 2016).

2.6.1.2 Paleontological Resources

As described in Section 2.7, Geology, Soils, and Seismicity, the geologic unit that underlies the project site is alluvium (CGS 2010). The project site is potentially located within the prehistoric shoreline of Owens Lake (2,000 to 7,600 years BP) (Bacon et al., 2006). Owens Lake is a perennial lake that held water continuously over the last 800,000 years but is currently a small fraction of its former size due to diversion of the Owens River in the early 1900s. Prior to the early 1900s, the depth of the lake fluctuated between approximately 20 to 50 feet deep covering an area of approximately 108 square miles (Reheis, 1991). The edge of the now-dry lakebed of Owens Lake, (known as the Owens Lake playa), is located approximately 3 miles to the north of the project site.

The Owens River was the source of the water in Owens Lake. Owens Lake periodically overflowed into a succession of lower-altitude lakes. Vertebrate and invertebrate fossils have been recovered from south of Owens Lake along the lower Owens River and drainage (Cogstone, 2007).

2.6.1.3 Native American Consultation

Assembly Bill 52

Assembly Bill (AB) 52 went into effect July 1, 2015, which established a formal consultation process for California Native American tribes as part of CEQA. The law requires a lead agency to consult with tribes that request consultation and is traditionally and culturally affiliated with the geographic area in which the proposed project would be located. To be notified of such proposed projects, tribes must first request notification from the lead agency. Eight tribes have informed Inyo County of a traditional or cultural affiliation to the Walker Creek Road Bridge project area.

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The proposed project is within the historic territory of the Owens Valley Paiute tribe.

Tribal Consultation Efforts

In 2015, local tribes were contacted regarding the project. Tribes were informed of the project details, record search results, and timing for archaeological surveys that would be conducted on site. One of the individuals contacted was present as a Tribal Monitor during subsurface testing (ASM 2016). The following tribes and tribe associations were contacted in 2015:

- ~~Big Pine Band of Owens Valley~~
- Big Pine Paiute Tribe of the Owens Valley (2)
- Bishop Paiute Tribe
- Fort Independence Indian Community of Paiutes
- Kern Valley Indian Council (2)
- ~~Kern Valley Indian Council~~
- Lone Pine Paiute Shoshone Reservation
- Timbisha Shoshone Tribe
- Walker River Reservation

In October 2017, Inyo County Board of Supervisors sent a formal notification to representatives of the eight Native American tribes with traditional or cultural affiliation to the project area. Table 2.6-3 includes the name of each tribal contact who received a letter regarding AB 52 consultation. Two tribes sent responses to the County, but expressed no interest in the project. To date, no additional responses have been received. No tribes have requested formal consultation or additional information about the proposed project.

Table 2.6-3 Summary of AB 52 Consultation Efforts

Tribe	Contact Name/Title	Response
Big Pine Paiute Tribe of the Owens Valley	Genevieve Jones, Chairperson	No Response
Bishop Paiute Tribe	Monty Bengochia, Tribal Historic Preservation Office	Response received. Tribe had no comments on the project.
Bishop Paiute Tribe	Chairperson of Bishop Paiute Tribe	No Response
Bishop Paiute Tribe	Valerie Spoonhunter, Interim Tribal Administrator	No Response
Cabazon Band of the Mission Indians	Doug Todd Welmas	No Response
Cabazon Band of the Mission Indians	Jacquelyn Barnum, Environmental Director	No Response
Fort Independence Indian Community of Paiutes	Norma Wilder, Chairperson	No Response
Lone Pine Paiute-Shoshone Tribe	Mary Wuester, Chairperson	No Response
Timbisha Shoshone Tribe	George Gholson, Chairperson	No Response

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Tribe	Contact Name/Title	Response
Torres Martinez Desert Cahuilla Indians	Michael Mirelez, Cultural Resource Coordinator	No Response
Twenty-Nine Palms Band of Mission Indians	Anthony Madrigal, Jr., Tribal Historic Preservation Officer	Response received. Tribe had no interest in the project.
Twenty-Nine Palms Band of Mission Indians	Darrell Mike, Chairperson	No Response
Twenty-Nine Palms Band of Mission Indians	Anthony Madrigal, Jr., Tribal Grants Administrator	No Response

2.6.2 Environmental Impacts

2.6.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Cultural Resources				
A) Cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5?	☐	☒	☐	☐
B) Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	☐	☒	☐	☐
C) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
D) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
Tribal Cultural Resources				
E) 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:				
a) 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	☐	☐	☐	☒

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

☐☐☐☒

2.6.2.2 Discussion

A and B) Would the project cause a substantial adverse change in the significance of a historical and/or archaeological resource as defined in §15064.5?

The Los Angeles Aqueduct is considered eligible for listing on the CRHR. The other previously recorded resource and newly identified cultural resources are recommended as ineligible for listing (ASM 2016). None of the historical resources on the project site or in the vicinity are identified as points of interest or state historical landmarks (OHP, 2018). The existing bridge would remain in place, although it is not eligible for listing nor a contributing element to the eligible Los Angeles Aqueduct. The proposed project would span the Los Angeles Aqueduct and not require construction within the banks, which would minimize loss of integrity by not affecting any remaining original materials or the workmanship of the Los Angeles Aqueduct. Additionally, construction of the replacement bridge would not affect the association between the Los Angeles Aqueduct and historic events. The proposed project would not impact the Los Angeles Aqueduct. There are no other known historic or archaeological resources on the project site. The project would have no impact on any previously recorded eligible resources.

Construction of the proposed project would require ground disturbing work during demolition and regrading of Walker Creek Road. The road and surrounding areas are highly disturbed due to construction of the previous roadway, bridge, and the Los Angeles Aqueduct. Although unlikely, previously undiscovered historic or archaeological resources that are eligible for listing on the CRHR could be uncovered during ground disturbing work. Impacts to any previously undiscovered historic or archaeological resources that are eligible for listing in the CRHP would be potentially significant. Mitigation Measure CUL-1 requires a professional archaeologist to conduct cultural resources sensitivity training and cessation of work within a 50-foot radius in the event of a cultural resource discovery. Consequently, the proposed project would not cause a substantial adverse change in the significance of a historical resource; therefore, impacts would be less than significant with mitigation.

Mitigation Measure CUL-1: Cultural Resources Sensitivity Training and Inadvertent Discovery

A professional archaeologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) prior to initiation of site preparation and/or construction, to alert construction workers to the possibility of exposing significant historic and/or prehistoric archaeological resources within the

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proposed project area. The training shall include a discussion of the types of prehistoric or historic objects that could be exposed and how to recognize them, the need to stop excavation at a discovery and within 50 feet of a discovery, and the procedures to follow regarding discovery protection and notification. An “Alert Sheet” shall be posted in staging areas, such as in construction trailers, to alert personnel to the procedures and protocols to follow for the discovery of a potentially significant historic and/or prehistoric archaeological resources.⁴

In the event that an archaeological resource is discovered, ground disturbing work shall be halted within 50 feet of the find, and a qualified cultural resources specialist/archaeologist shall be brought to the site. The qualified cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area.

If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within 50 feet of the find, and the qualified cultural resources specialist/archaeologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). If the resource is determined to be prehistoric, the evaluation and determination of appropriate measures shall be coordinated with regional Native American tribes. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources. If preservation-in-place and avoidance is not possible, data recovery shall be undertaken. The methods and results of data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources

⁴ Significant prehistoric cultural resources may include:

- a. Human bone, either isolated or intact burials.
- b. Habitation, occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
- c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
- d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
- e. Isolated prehistoric artifacts (Basin 2015).

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Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by the County.

C) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is likely within the prehistoric boundary of Owens Lake. Vertebrate and invertebrate fossils could be found in the project area. Construction of the proposed project would require ground disturbing work during demolition and regrading of Walker Creek Road. Portions of the project site are previously disturbed due to construction of the existing roadway, bridge, and the Los Angeles Aqueduct. The proposed roadway realignment is in a less disturbed area. Previously undiscovered paleontological resources could be found during ground disturbing work due to the sensitivity of the geologic formation underlying the work area. The impact to a previously undiscovered paleontological resource from ground disturbing work could be potentially significant. Mitigation Measure CUL-2 requires a professional paleontologist to provide sensitivity training and cessation of work within a 50-foot radius in the event of a paleontological resource discovery and until a determination can be made. The impact would be less than significant with mitigation.

Mitigation Measure CUL-2: Paleontological Resources Sensitivity Training and Inadvertent Discovery

A professional paleontologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) to alert construction workers to the possibility of exposing significant paleontological resources within the proposed project area. The training shall be conducted to recognize fossil materials in the event that any are uncovered during construction.

In the event that a paleontological resource is uncovered during project implementation, all ground-disturbing work within a 50-foot radius shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts would occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether it is “unique”⁵ under CEQA, Appendix G, part V. If the resource is determined

⁵ A unique paleontological resource is any fossil or assemblage of fossils, or paleontological resource site or formation that meets any one of the following criteria:

- Is the best example of its kind locally or regionally;
- Illustrates a paleontological or evolutionary principle (e.g. faunal succession; plant or animal relationships);

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not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources. If preservation-in-place is not feasible and avoidance is not possible, the fossils shall be recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology (SVP) standard guidelines. Work may commence upon completion of treatment.

D) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Human remains were not discovered during field surveys or subsurface testing (ASM 2016). Construction of the proposed project would require ground disturbing work during demolition and regrading of the road. Portions of the project site are highly disturbed due to construction of the existing roadway, bridge, and the Los Angeles Aqueduct. The proposed roadway realignment is in a less disturbed area. Previously undisturbed human remains could be encountered, although this is unlikely. Disturbance of human remains would result in a potentially significant impact. Mitigation Measure CUL-3 requires cessation of ground disturbing work and examination by the Medical Examiner if human remains are uncovered. The impact would be less than significant with mitigation.

Mitigation Measure CUL-3: Human Remains

If human remains are encountered during construction, ground disturbing work shall halt within 50 feet of any area where human remains or suspected human remains are encountered in compliance with California law (Health and Safety Code section 7050.5; PRC sections 5097.94, 5097.98, and 5097.99). The County shall contact the Medical Examiner at the county coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by the County. If the remains are determined

-
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data);
 - Encompasses any part of a "type locality" of a fossil or formation;
 - Contains a unique or particularly unusual assemblage of fossils;
 - Occupies a unique position stratigraphically within a formation; or
 - Occupies a unique position, proximally, distally or laterally within a formation's extent or distribution (County of San Diego, 2009).

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to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC).

The NAHC shall immediately notify the identified Most Likely Descendant (MLD), and the MLD has ~~24~~ 48 hours from the time they are granted access to the site to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within ~~24~~ 48 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC shall mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

E) 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:

a) 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

The only eligible resource within the project site is the Los Angeles Aqueduct, as discussed in Impact A). No other listed or eligible resources, including prehistoric cultural resources, ~~are located~~ have been recorded within one mile of the project site. Pursuant to AB 52, Inyo County Board of Supervisors sent a formal notification to representatives of the eight Native American tribes with traditional or cultural affiliation to the project area. None of the tribes contacted requested consultation under AB 52 or identified tribal cultural resources or the potential for tribal cultural resources in the project vicinity. The proposed project would not impact ~~a listed or eligible~~ tribal cultural resources. No mitigation is required.

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

None of the tribes contacted pursuant to AB 52 requested consultation regarding the proposed project (refer to Table 2.6-3). No known tribal cultural resources are present on the project site or in the immediate area. No impact would occur and no mitigation is required.

2.7 GEOLOGY AND SOILS

2.7.1 Environmental Setting

2.7.1.1 Geology

The Basin and Range Province is characterized by extreme elevation changes from the mountain ranges to the low valleys. Twenty million years ago, crustal extension associated with the Basin and Range Province caused extensive volcanism in the Sierra Nevada Range. The range is believed to have started to uplift four million years ago bringing the magmatic plutons (granite) above the surface forming a tall mountain range. Erosion by glaciers exposed the granite and shaped the mountains and cliffs that make up the current Sierra Nevada (Michaelsen, 2011). Owens Valley is one of the western-most downdropped blocks, or grabens, of the Basin and Range Province.

Glacial erosion prior to 10,000 years BP (Pleistocene) in the Sierra Nevada Mountains resulted in deposition of moraines in Owens Valley. More recent water erosion from Owens River and other streams formed the present day Owens Valley (Pakiser et al., 1964). The geologic unit that underlies the project site is younger alluvium (CGS, 2010). The alluvium is comprised of poorly sorted, unconsolidated, gravel, sand, silt, and clay.

2.7.1.2 Soils

Two soil units are located within the project site, Arizo-Yellowrock complex and Cajon gravelly loamy sand. Arizo-Yellowrock soils are comprised of arizo soils and yellowrock soils. Arizo soils are excessively drained. Yellowrock soils are somewhat excessively drained. Runoff from Arizo-Yellowrock complex soils is very low. Cajon soils are somewhat excessively drained. Runoff from Cajon soils is low (NRCS, 2016).

2.7.1.3 Faulting and Seismicity

No active⁶ faults traverse the project site. The nearest designated Alquist-Priolo Fault Hazard Zone, Owens Valley Fault Zone, is located approximately 2.6 miles north of the proposed project site. The Owens Valley Fault Zone strike-slip fault, 1872 rupture is located 986 feet northeast of the project site (USGS and CGS, 2006). This fault has an annual slip rate of approximately 2 millimeters per year (USGS, 1994).

2.7.1.4 Landslide Hazards

The project site is located within Owens Valley. Topography in the project area is relatively flat. The potential for landslides is low (USGS, 2011).

2.7.1.5 Liquefaction Hazards

Owens Valley has experienced liquefaction in association with seismic activity. Extensive liquefaction was observed in the Owens Lake area during the 1872 Owens Valley earthquake

⁶ A fault is considered active if the fault has displaced earth materials during the Holocene Epoch.

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and more recently, liquefaction occurred during the 2009 Olancho earthquake (Amos et al., 2013), (Holtzer et al., 2010). The proposed project is located 2.4 miles from Owens Lake and groundwater is expected to occur at depth. The liquefaction potential in the project vicinity is moderate due to the depth to groundwater and known liquefaction at Owens Lake.

2.7.2 Environmental Impacts

2.7.2.1 Checklist

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

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2.7.2.2 Discussion

A) Would the project 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?

There are no identified Alquist-Priolo fault zones that cross the project site. No impact associated with rupture of a known earthquake fault would occur.

ii) Strong seismic ground shaking?

Construction

The Owens Valley fault is an active fault located less than 1,000 feet from the project site. Severe ground shaking has the potential to cause injury to construction workers during implementation of the proposed replacement bridge project. However, due to the short duration of construction (5 months), the potential for strong seismic shaking to occur and harm construction workers is minimal. The impact from ground shaking would be less than significant.

Operation

The proposed roadway approaches and replacement bridge would be designed to meet current California seismic structure codes. The new structure would withstand most seismic shaking and would be a substantially safer during a seismic event than the existing bridge. Significant impacts from strong-seismic ground shaking are not expected.

iii) Seismic-related ground failure, including liquefaction?

Construction

The Owens Valley area has a depth to water table of less than 50 feet, with alluvial soils, and numerous faults (DWR, 2016). Additionally, liquefaction has been known to occur in Owens Valley. Due to these local features and historical liquefaction, there is a moderate potential for liquefaction on the project site. Seismic events could result in liquefaction occurring on the project site. However, due to the short duration of construction (5 months), the potential for liquefaction to occur and harm construction workers is minimal. The impact from ground failure would be less than significant.

Operation

The proposed roadway approaches and replacement bridge would be designed to meet current California seismic structure codes. Therefore, the new structure would withstand most liquefaction events and would be a substantially safer during a liquefaction event than the existing bridge. Significant impacts from ground failure are not expected.

iv) Landslides?

The project site and surrounding area is flat and has a low potential for landslides. Significant impacts from landslides would not occur.

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B) Would the project result in substantial soil erosion or the loss of topsoil?

During construction of the proposed replacement of the bridge, exposed soil could erode from storm runoff or wind, although the project site soil types are well drained and generally do not experience much run-off. The proposed project would require grading of approximately 1.7 acres during realignment of Walker Creek Road and the LADWP Patrol Road. As grading exceeds the 1-acre threshold, a National Pollutant Discharge Elimination Service (NPDES) General Permit for Construction Activities would be required. The NPDES General Construction Permit requires that a Storm Water Pollution Prevention Program (SWPPP) be prepared by a Qualified SWPPP Developer that would include Best Management Practices (BMPs) to reduce erosion of disturbed soils. BMPs that would be implemented during site grading and construction would include hydroseeding and the use of straw hay bales and silt fences to control release of sediment. In addition, the SWPPP would limit construction to the non-rainy season. The SWPPP would be submitted to the Inyo County Public Works Department for approval prior to issuance of a grading permit. Implementation of the SWPPP and associated erosion BMPs would minimize the impact from project construction to less than significant.

C) Would the project 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?

Construction

The project site is flat and not susceptible to landslides. As described above, liquefaction has a moderate potential to occur on the project site due to the soils and groundwater table. The construction vehicles and equipment used to construct the proposed project would not result in instability of the soils in the area. The impact to unstable soils from construction of the proposed project would be less than significant.

Operation

The proposed roadway approaches and replacement bridge would be designed to meet current California seismic structure codes. Therefore, the new structure would not result in increased instability of the project site soils. The proposed project would not affect the stability of the slopes in the area. The impact would be less than significant.

D) Would the project 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 are generally soils with high amounts of clay. Soils on and adjacent to the project site are primarily loamy sand and do not exhibit high expansive potential. The proposed bridge would be designed to American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications with California Amendments (Fourth Edition), as well as Caltrans Seismic Design Criteria Version 1.6. The impact to the proposed replacement bridge from expansive soil would be less than significant.

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E) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No septic tanks or alternative wastewater disposal systems would be constructed as part of the proposed project. No impact would occur.

2.8 GREENHOUSE GAS EMISSIONS

2.8.1 Environmental Setting

Greenhouse gases (GHGs) are global pollutants, unlike criteria air pollutants and toxic air contaminants. Global climate change can result in increased temperatures; changes in snow and rainfall patterns; and an increase in droughts, tropical storms, and heavy rain events. Listed below are the most prominent GHGs that have been identified as contributing to global climate change:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)

The State of California adopted the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) on September 27, 2006, to address the threat of global warming caused by the increase in GHG emissions. AB 32 requires sources within the state to reduce carbon emissions to 1990 levels by the year 2020. AB 32 estimated the 1990 emissions to be 427 million metric tons CO₂ equivalent (MMCO₂e).

CARB developed mandatory reporting rules for significant sources of GHGs as required by AB 32 (Subchapter 10, Article 1, sections 95100 to 95133, Title 17, California Code of Regulations). CARB released the 2008 Scoping Plan that indicated how GHG emission reductions would be achieved from significant GHG sources by adopting regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. The First Update to the Climate Change Scoping Plan was released in 2014 and has a new statewide goal of 33 percent renewable energy, rather than 20 percent as outlined in AB 32, in the State of California's energy portfolio by 2020. The updated Scoping Plan outlines voluntary early actions and reductions (CARB, 2014).

The updated Scoping Plan adjusted the estimated 1990 emissions to 431 MMCO₂e. The 2008 Scoping Plan projected 2020 emissions to be 596 MMCO₂e. Emission sources in the state would need to reduce the projected 2020 emissions by approximately 28 percent to reach the reduction goal of 1990 emissions (CARB, 2014). SB 350 was passed in 2015 that requires 40 percent of California electricity sold to retail customers be generated by renewable resources by the end of 2024, 45 percent by 2027, and ultimately 50 percent by 2030.

The project site is under the GBUAPCD jurisdiction. The GBUAPCD is tasked by CARB under AB 32 to regulate GHG emissions related to discretionary project approvals under CEQA. The

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GBUAPCD does not currently have thresholds or guidance regarding the significance of construction related greenhouse gas emissions but recommends the use of *Quantifying Greenhouse Gas Mitigation Measures* by the California Air Pollution Control Officers Association (CAPCOA). As the GBUAPCD has not established significance criteria for GHG emissions, the significance of proposed project's GHG emissions are evaluated using the SCAQMD GHG threshold. The significance threshold for industrial facilities is 10,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year, including amortized construction emissions over a 30-year period (SCAQMD, 2015). While this threshold is meant to apply only to industrial facilities, it is the most representative threshold available for construction of bridge.

2.8.2 Environmental Impacts

2.8.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
B) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☒	☐

2.8.2.2 Discussion

A) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the replacement bridge and roadway approaches would generate greenhouse gas emissions from use of construction equipment, haul trucks, and vehicles used for construction worker transportation. GHG emissions were estimated using the CalEEMod model. Construction would generate a total of 194 MTCO_{2e} during 2020. The proposed replacement bridge would not increase traffic capacity. Therefore, the level of traffic in the area would be similar to existing conditions. The proposed project would not generate operational GHG emissions. Since no change is anticipated for operational emissions, only construction emissions are used when calculating the GHG emission of this project. Amortized construction GHG emissions would be approximately 6 MTCO_{2e} a year which would not exceed the 10,000 MTCO_{2e} per year threshold for this project (Appendix A). The impact from GHG emissions generated during construction of the proposed project would be less than significant.

B) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?

The CARB Scoping Plan provides an outline of actions to reduce California's GHG emissions. The Scoping Plan requires CARB and other state agencies to adopt regulations and other

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initiatives to reduce GHGs. However, at this time, there are no applicable local plans, mandatory GHG regulations, or finalized agency guidelines that would apply to this project. As such, the proposed project does not conflict with any local plans. Additionally, the proposed project would generate very minimal GHG emissions compared to GHG thresholds that have been developed by SCAQMD to meet compliance with AB 32 requirements. The impact would be less than significant.

2.9 HAZARDS AND HAZARDOUS MATERIALS

2.9.1 Environmental Setting

2.9.1.1 Hazardous Materials

There are no known contaminated sites within 0.25 mile of the project site (SWRCB, 2018) (DTSC, 2018). However, EnviroStor identifies the former Olancho Airfield in Olancho, California, as contaminated with lead (DTSC, 2007). The site was evaluated and determined not to be a Formerly Used Defense Site. The closest boundary of the former airfield is approximately 0.8 mile (4,200 feet) east of the existing Walker Creek Road Bridge (Madsen, 1999).

2.9.1.2 Fire Hazards

The area around the project site is susceptible to wildfires due to the surrounding vegetation and dry conditions through the summer season. The project site is located within a State Responsibility Area (SRA) designated as “high” fire hazard severity (CALFIRE , 2007).

2.9.2 Environmental Impacts

2.9.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
B) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

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C) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☐	☒
D) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, 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 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project corridor?	☐	☐	☐	☒
F) For a project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project corridor?	☐	☐	☐	☒
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?	☐	☒	☐	☐

2.9.2.2 Discussion

A) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction

Hazardous materials present during project construction may include gasoline, diesel fuel, hydraulic oils, equipment coolants, and any generated wastes that may include these materials. Fueling of equipment and vehicles would be performed on-site. Construction equipment and vehicles would use a minimal amount of hazardous materials. Gasoline and diesel fuel would be stored in small quantities at the staging areas during construction. Although very few individuals live and work in the area, a hazard to the public or the environment could occur through the transport and use of gasoline and diesel fuel on the project site. Spill response and control would be addressed in the project-specific SWPPP, as required by the State Water Quality Control Board, Construction General Permit (Order 2009-0009-DWQ). Compliance with the spill control and response measures in the SWPPP would reduce the risk to the public and environment from transport and use of hazardous materials. The impact from use, disposal, or transport of hazardous materials during construction would be less than significant.

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Operation

The proposed replacement bridge would not require use, disposal, or transport of hazardous materials after construction is complete. No impact would occur.

B) Would the project 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?

Construction

The replacement bridge is proposed to be pre-cast and, therefore, would be transported to the project site in pieces and assembled on site. The new bridge would not require concrete framework or casting over the aqueduct. Construction equipment and vehicles would use small amounts of hazardous materials including diesel fuel, oil, and gasoline. A spill of such materials is unlikely, but could result in a significant impact were it to contaminate the Los Angeles Aqueduct. Spill response and control would be addressed in the project-specific SWPPP, as required by the State Water Quality Control Board, Construction General Permit (Order 2009-0009-DWQ). Compliance with the spill control and response measures in the SWPPP would reduce the impacts from hazardous spills to less-than-significant levels.

Operation

Replacing the existing, unsafe bridge with the proposed bridge would reduce the potential for vehicular accidents once construction is complete, minimizing accidental spills of fuels. The design of the proposed bridge would prevent drainage of stormwater off of the bridge into the Los Angeles Aqueduct. Therefore, potential spills of fuels would not drain into and contaminate the Los Angeles Aqueduct. No impact to the public or environment from accidental release of fuels or other hazardous materials is expected.

C) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

No schools are located within 0.25 mile of the project site. The nearest school is Lone Pine High School located approximately 24 miles to the north of the project site. The project would not pose a hazard to schools.

D) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?

The project site is not located on a site included on a list of hazardous materials sites. The project would result in no impacts associated with emissions from hazardous materials sites.

E) Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, where the project would result in a safety hazard for people residing or working in the project corridor?

The proposed project is not located within an airport use plan or within 2 miles of a public airport or public use airport. The project would have no impacts associated with airport hazards.

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F) Would the project be located within the vicinity of a private airstrip where it would result in a safety hazard for people residing or working in the project corridor?

The proposed project is not located in the vicinity of any active private airstrips. The Olancho Airfield site is commercially developed and no longer in use (Madsen, 1999). The Grant Airstrip is also no longer in use. The project would have no impacts associated with airstrip hazards.

G) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction

The existing bridge would remain open to vehicular traffic during construction of the proposed project. The approach roads would require traffic control during construction. Emergency access and access for evacuation would be made available at all times. No impacts to emergency access would occur.

Operation

The proposed bridge would be wider than the existing bridge. Use of the new bridge would allow for safer passage of larger emergency response vehicles and easier evacuation, if needed. The proposed project would have no impact on emergency response.

H) Would the project 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?

Construction

The project site is designated as a “high” fire severity zone by CALFIRE. Construction equipment could create sparks and ignite a fire. Other potential fire hazards could include worker behavior such as smoking and disposal of cigarettes as well as parking vehicles on dry vegetation. Mitigation Measure HAZ-1 requires proper fire hazard training and handling of potential ignition sources including vehicles and cigarettes. The impact from fire hazards would be less than significant with implementation of mitigation.

Mitigation Measure HAZ-1: Fire Prevention Procedures

- Prior to ground disturbing activities, all workers on the project site shall be trained regarding the proper handling and/or storage of materials posing a fire hazard, potential ignition sources (such as cigarettes or sparking equipment), and appropriate types and use of fire protection equipment.
- Fire suppression equipment, including fire extinguishers, water, and shovels, shall be available on-site at all times.
- Vehicles shall not be parked in vegetated areas.
- Smoking shall be allowed only in designated areas. The designated areas must be unvegetated. Cigarette butts shall be properly contained and transported off-site for disposal.

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Operation

Use and maintenance of the proposed bridge would not increase the risk of fire hazard. No impact from operation and maintenance of the bridge would occur.

2.10 HYDROLOGY AND WATER QUALITY

2.10.1 Environmental Setting

2.10.1.1 Hydrology

Walker Creek originates in the Inyo National Forest in Inyo County. Walker Creek and its tributary creeks collect runoff from the western ridge of the Inyo National Forest. The creek and tributaries merge at the bottom of the western ridge, approximately 3.5 miles upstream of the project site. Approximately 2.8 miles west of the project site, Walker Creek splits into two separate channels. The southern channel runs parallel to Walker Creek Road to the project site and the northern channel eventually converges with Olancho Creek (WRECO, 2013).

The primary hydrologic feature in the project vicinity is the southern fork of Walker Creek. The creek pools in a manmade detention basin north of Walker Creek Road and west of the Los Angeles Aqueduct. When enough water fills the detention basin, it overflows through a metal culvert into the Los Angeles Aqueduct (WRECO, 2013).

The project site is designated as an area with minimal flooding, Zone X, which are areas determined to be outside the 500-year flood zone (0.2 percent annual chance of flooding in any one year) (FEMA, 2011). There are no jurisdictional wetlands on the project site (Caltrans, 2016).

2.10.1.2 Precipitation

The mean annual precipitation in the area is approximately 6.5 inches. Most of the precipitation falls between December and March. Approximately one inch of snow falls monthly from December to February (WRCC, 2016).

2.10.1.3 Groundwater

The project site is located in the Owens Valley Groundwater Basin (Basin). The groundwater capacity of the basin is approximately 35,000,000 acre feet and covers an area of 1,030 square miles. It is primarily recharged through streamflow percolation from the surrounding mountains, with lesser recharge occurring through infiltration of excess irrigation waters and precipitation. Groundwater quality is generally good in the project vicinity (DWR, 2004).

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2.10.2 Environmental Impacts

2.10.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
B) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of existing nearby wells would drop to a level that 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 that 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 that would result in flooding on- or off-site?	☐	☐	☒	☐
E) Create or contribute runoff water that 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 that would impede or redirect flood flows?	☐	☐	☐	☒

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I) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
J) Cause inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

2.10.2.2 Discussion

A) Would the project violate any water quality standards or waste discharge requirements?

Construction

Implementation of the proposed project would require grading 2.3 acres, which has the potential to result in erosion and sedimentation of water bodies in the vicinity. A general NPDES permit would be required for the construction activities as described in Section 2.7.2, Impact B). The contractor would be required to implement a SWPPP, in compliance with the Construction General Permit (Order 2009-0009-DWQ), including associated sediment and erosion control BMPs. The proposed project would comply with NPDES permit requirements and would therefore not violate any water quality standards. The impact would be less than significant.

Operation

No additional ground disturbance would occur after the project is constructed. Traffic and usage would not change above existing conditions. No impact to water quality would occur.

B) Would the project 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 existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Construction

Water for dust suppression during construction would be obtained from an existing water source. Implementation of the proposed project would require approximately 10,000 gallons (0.03 acre feet) per day for a total of up to one million gallons of water during the entire construction period. Water would be obtained from an existing privately owned source and trucked to the site daily. Water needs in Inyo County are primarily obtained from groundwater. The anticipated pumping of groundwater in Inyo County for 2016 to 2017 was estimated at 24 billion gallons (76,348 acre feet) due to diminished surface water (ICWD, 2015). Assuming similar pumping in the coming years, the water supply needed during construction would represent 0.004 percent of the total groundwater withdrawal. The proposed project would not deplete groundwater supplies due to the short duration of water use and small amount of water required. The impact would be less than significant.

Operation

The proposed project would result in an increase in impermeable surfaces by approximately 0.15 acre from construction of paved roadway approaches. The proposed bridge replacement and approach roadways would not measurably decrease groundwater recharge because the

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paved roadway would be constructed in an upland area and the water would flow off the road to adjacent undisturbed vegetated areas during storms. The proposed project would not interfere substantially with groundwater recharge and the impact would be less than significant.

C) Would the project 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 that would result in substantial erosion or siltation on- or off-site?

Construction

Construction of the proposed project would not substantially alter the detention basin adjacent to the Los Angeles Aqueduct or the existing bridge, which functions as an over chute structure for Walker Creek. The course of Walker Creek would not be altered during construction of the roadway approaches. Construction activities adjacent to the detention basin could introduce the potential for erosion or additional siltation into Walker Creek. As described under Section 2.7.2, Impact B), the County would prepare a SWPPP for the proposed project in compliance with the NPDES permit. Implementation of sediment and erosion control BMPs identified in the SWPPP would reduce the impact from erosion and siltation to less than significant.

Operation

The proposed project would not disrupt the course of Walker Creek. The proposed project would increase impermeable surfaces by approximately 0.15 acre from construction of paved roadway approaches. The small increase in impervious surfaces has the potential to increase runoff, erosion, and siltation. The presence of the proposed road and bridge would not result in a substantial increase in the rate of erosion or siltation in the area. The impact would be less than significant.

D) Would the project 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 that would result in flooding on- or off-site?

The proposed project would not modify the existing detention basin adjacent to Walker Creek or drainage conditions in the vicinity of the existing bridge. The proposed project would include the installation of reinforced concrete pipe culverts with a maximum diameter of 4 feet, under the western and eastern realigned roadway approach. The culverts would permit a portion or all of the 100-year flood to flow through and would decrease flooding on the road relative to existing conditions (i.e., no culvert). Currently there are no culverts under the existing Walker Creek Road bridge approaches. The culverts would help to contain the flow and would decrease the likelihood of flooding. The impact would be less than significant.

The proposed project would include the installation of a replacement bridge downstream from the existing bridge. LADWP requires the underside of the proposed bridge be at least 2 feet higher than that of the existing bridge for clearance over the Los Angeles Aqueduct. The bridge foundation would be constructed outside of the Los Angeles Aqueduct concrete structure leaving a minimum of 2 feet of clearance at the front face of the abutments for future maintenance and

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inspection under the bridge. The proposed project would not alter the Los Angeles Aqueduct or affect the flow of the water. No impact related to flooding on- or off-site would occur.

Vehicles driving along Walker Creek Road would not disrupt the flow of Walker Creek. The proposed project would increase impermeable surfaces by approximately 0.15 acre from construction of paved roadway approaches. The small increase in impervious surfaces has the potential to increase runoff; however, the small area of additional impervious surface would not cause flooding on- or off-site because the additional impervious surface area is too small to affect peak flood flows in the area. The proposed project would not substantially impact on- or off-site flooding. The impact is less than significant.

E) Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

There are no stormwater facilities on the project site. The proposed project would not generate a significant amount of runoff water during or as a result of construction activities including watering for dust control. Dust control water would evaporate before running off site. The impact during construction from runoff would be less than significant.

Operation

The proposed project would increase impermeable surfaces by 0.15 acre as a result of the paved roadway approaches and proposed bridge. Runoff water from the proposed bridge and roadway approaches would not drain directly to the Los Angeles Aqueduct. Runoff would flow off of the proposed bridge via overside drains into a natural drainage to the east of the Los Angeles Aqueduct and into the LADWP drainage ditch to the west of the Los Angeles Aqueduct. The new impervious surface would not contribute additional sources of polluted runoff because it would be from such a small area. Traffic is not expected to increase. The impact from stormwater runoff during operation would be less than significant.

F) Would the project otherwise substantially degrade water quality?

See responses to Impact A) and Impact B), above. The proposed project has the potential to degrade water quality from increased sedimentation and from spills and leaks. Spill response and control BMPs will be included in the project-specific SWPPP in compliance with the Construction General Permit (Order 2009-0009-DWQ). Once the proposed project is constructed, no additional ground disturbance would occur, increases in traffic are not anticipated, and the increase in impervious surface that could contribute polluted runoff would be minimal. The impact to water quality would be limited and less than significant.

G) Would the project 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 involve construction of new housing. No impact would occur.

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H) Would the project place structures within a 100-year flood hazard area, which would impede or redirect flood flows?

The proposed replacement bridge and roadway approaches are not within a 100-year flood zone (FEMA 2011). No impact would occur.

I) Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No water bodies with levees or dams are located in the vicinity of the project site. The closest waterbody with a dam upstream of the project site is Tinemaha Reservoir approximately 56 miles to the north. The proposed project is not within a dam failure inundation area. No impact would result from implementation of the proposed project.

J) Would the project cause inundation by seiche, tsunami, or mudflow?

There are no large water bodies in the vicinity of the project site and the project site is in a flat valley area, not subject to mudflow risks. No impact would occur.

2.11 LAND USE AND PLANNING

2.11.1 Environmental Setting

2.11.1.1 Regional

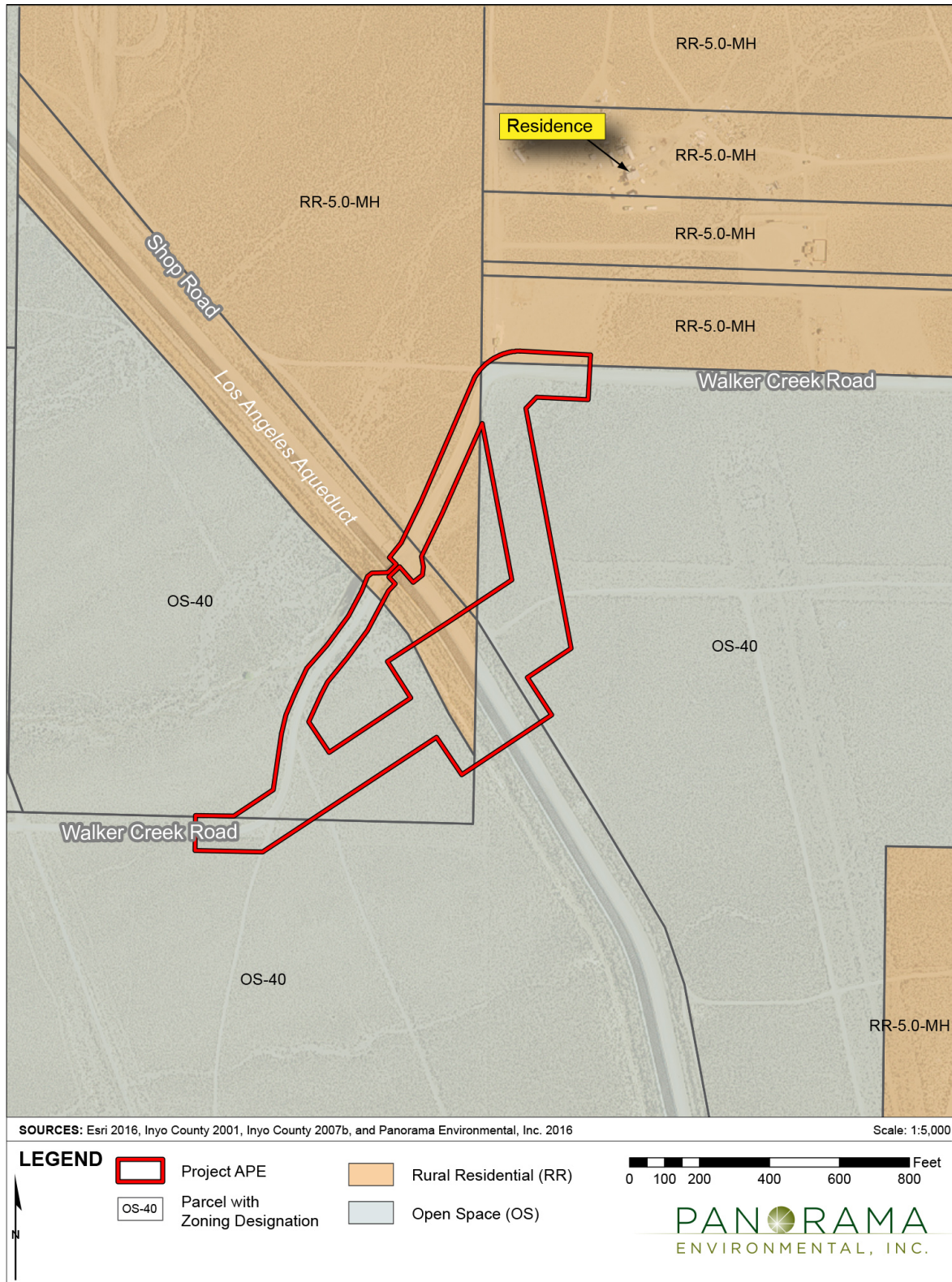
Inyo County is the second largest county in California with a total land area of 10,140 square miles. Only 1.9 percent of the land is held by private ownership. Federal agencies own 91.6 percent, the State of California owns 3.5 percent, LADWP owns 2.7 percent, and the County/other local agencies/Indian reservations own the remaining 0.3 percent of land in the County (Inyo County, 2001). The City of Ridgecrest, the closest urban center, is located approximately 45 miles to the south. The populated areas of Inyo County are located along the U.S. 395 corridor in small communities. The project site is located within the unincorporated community of Olancho.

2.11.1.2 Project Site

The project site is located in the Owen's Valley area in unincorporated Inyo County approximately 0.5 mile west of the intersection of Walker Creek Road with U.S. 395. The existing roadway alignment is within the County ROW. The proposed project crosses existing LADWP ROW, which encompasses the Los Angeles Aqueduct and patrol road. The land use designations for the project site and surrounding parcels include open space (OS) and rural residential (RR). The open space designation allows for a variety of permitted uses, including single-family dwellings, wilderness areas, wildlife refuges, ranches, farms, and orchards (Inyo County, 2007). The principal permitted uses for the rural residential designation are single-family dwellings and orchards (Inyo County, 2007). No dwelling units are located on the project site; however, a residence is located over 600 feet northeast of the eastern roadway approach as shown in Figure 2.11-1. The land use and zoning designations of the parcels around the project site are shown in Figure 2.11-1.

2 IS CHECKLIST

Figure 2.11-1 Land Use and Zoning Designations



Source: (Inyo County, 2001 ; Inyo County, 2007)

2 IS CHECKLIST

Recreational areas in the region include the Inyo National Forest are accessible by Walker Creek Road and Bridge (see Section 2.16, Recreation). The region has relatively sparse human habitation and little development.

2.11.2 Environmental Impacts

2.11.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Physically divide an established community?	☐	☐	☐	☒
B) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, 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?	☐	☐	☐	☒

2.11.2.2 Discussion

A) Would the project physically divide an established community?

The existing road and bridge would remain open during construction of the proposed bridge, with minimal short-term delays. The proposed bridge would provide the same access for residences who live in the area and visitors accessing the Inyo National Forest as the existing bridge. No impact to established communities would occur.

B) Would the project 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 County would obtain a ROW, rights of entry, and a temporary construction easement from private landowners for locations where the proposed project crosses private property. The County would also obtain an encroachment permit from LADWP for realignment of the patrol road and roadway approaches. The permits would allow a temporary easement for construction and a permanent easement to permit access during construction and realignment of the LADWP patrol road and roadway approaches. The proposed project road realignments have been designed in consultation with LADWP and include infrastructure to accommodate the LADWP patrol roads on either side of the aqueduct. The proposed project would not change the zoning and land use designations. As such, the proposed project would not conflict with the

2 IS CHECKLIST

Inyo County General Plan and Zoning Ordinance. The proposed project would not impact applicable land use plans, policies, or regulations.

C) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no habitat, natural community, or other conservation plans that apply to the project site. No conflicts would occur.

2.12 MINERAL RESOURCES

2.12.1 Environmental Setting

2.12.1.1 Regional

As discussed under Section 2.6, Cultural Resources, mining was a significant factor that drove settlers to Owens Valley. Inyo County has historically produced substantial quantities of mineral resources including precious metals such as gold, silver, and copper. Other resources mined in Inyo County include uranium, thorium, tungsten, borates, soda ash, limestone, and salt (Inyo County, 2015).

2.12.1.2 Project Site

Aggregate minerals such as sand and gravel may be found in the project vicinity (Inyo County 2015). Mining for salt has historically occurred in the vicinity of Owens Lake. Mining for other mineral resources has historically occurred in the Coso Range and other regions outside of Owens Valley (California Division of Mines, 1951). Non-metallic mineral extraction occurs to the northwest of the project site, approximately 0.75 mile away (USGS, 2018).

2.12.2 Environmental Impacts

2.12.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
B) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

2 IS CHECKLIST

2.12.2.2 Discussion

A) Would the project 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 bridge replacement and culvert installation would require cut-and-fill of soil during grading and the import of aggregate and other materials for paving of the proposed roadway approaches and bridge. The area requiring paving, including the proposed bridge, would be 0.15 acre. The proposed project would not require additional imported soil but would require use of paving materials such as aggregate. The amount required to pave the proposed project would not be substantial. The impact would be less than significant.

B) Would the project 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?

No known mineral resource sites are located on the project site. The proposed project is a bridge replacement and would not change the use of the project site or adjacent parcels. The proposed project would potentially improve access to mineral resources west of the Los Angeles Aqueduct near Walker Creek Road. The proposed project would not result in the loss of a mineral resource recovery site. No impact would occur.

2.13 NOISE

2.13.1 Environmental Setting

2.13.1.1 General Background

Noise is defined as unwanted and objectionable sound. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. The method commonly used to quantify environmental sounds consists of evaluating all frequencies of a sound in accordance with a filter that reflects the fact that human hearing is less sensitive at very low and very high frequencies compared to mid-range frequencies. This is called “A” weighting, and the dB level measurement is called the A-weighted sound level (dBA).

A-weighted sound level (dBA) is expressed on a logarithmic (power of 10) scale using a frequency-weighted pattern that duplicates the human ear’s sensitivity to sound. A 70-dBA sound level is approximately twice as loud as a 60-dBA sound level and four times as loud as a 50-dBA sound level.

2.13.1.2 Groundborne Vibrations

Vibrating objects in contact with the ground radiate energy through the ground. Vibrations from large and/or powerful objects are perceptible by humans and animals. The rumbling sound caused by vibrating room surfaces is called groundborne noise. Vibratory motion is commonly described by identifying the peak particle velocity (PPV). PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage (Caltrans, 2004). Table 2.13-1 provides the vibratory thresholds for damage to structures, depending on the type of construction.

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Table 2.13-1 Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
Reinforced-concrete, steel or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Source: (FTA, 2006)

Background vibration levels in the project vicinity are low. Sources include vehicles traveling on Walker Creek Road and Walker Creek Road Bridge as well as LADWP vehicles patrolling the Los Angeles Aqueduct. These sources create negligible levels of vibration.

2.13.1.3 Noise Levels

Background noise levels in the project vicinity are generally low and are mostly natural noises punctuated by occasional manmade noises. Noise sources include vehicles on Walker Creek Road and Walker Creek Road Bridge as well as LADWP vehicles patrolling the Los Angeles Aqueduct. High wind can also contribute substantially to background noise levels in the project vicinity.

Ambient noise level on the project site is assumed to be typical of a quiet, rural region, between 30 and 40 dBA, due to the distance to U.S. 395. Table 2.13-2 shows typical noise levels of various environments for comparison.

2.13.1.4 Sensitive Noise Receptors

Noise exposure goals for different types of land uses reflect the varying noise sensitivities associated with those uses. Hospitals, schools, libraries, and residences are the most sensitive to noise intrusion and, therefore, have more stringent noise exposure targets than manufacturing or agricultural uses. The nearest sensitive receptor in the project vicinity is a residence conservatively assumed to be as close as 650 feet west of the project site. There are no other homes within 1,000 feet of the project site.

2.13.1.5 Noise Standards

CEQA does not specify a numerical threshold for “substantial increases” in noise, and no federal regulations that limit overall environmental noise levels are established; however, federal guidance documents address environmental noise and regulations for specific sources.

The EPA published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* in 1974. This document provides information for state and local governments to use in developing their own ambient noise standards. The EPA determined that a day-night sound level of 55 dBA protects the public from indoor and outdoor activity interference.

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Table 2.13-2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: (Caltrans, 1998)

The EPA, the Federal Highway Administration (FHWA), and the U.S. Department of Transportation (USDOT) have developed guidelines for noise. Under the authority of the Noise Control Act of 1972, the EPA established noise emission criteria and testing methods, published at 40 CFR Part 204, which apply to some construction and transportation equipment (portable air compressors and medium- and heavy-duty trucks). These regulations apply to trucks that would transport equipment to the project site. Table 2.13-3 summarizes federal guidelines and regulations for exterior noise.

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Table 2.13-3 Summary of Federal Guidelines and Regulations of Exterior Noise (dBA)

Agency	Leq	Ldn
Federal Energy Regulatory Commission	[49]	55
Federal Highway Administration (FHWA)	67	[67]
U.S. Environmental Protection Agency (EPA)	[49]	55
U.S. Department of Housing and Urban Development	[59]	65

Notes:

[] indicates calculated equivalent standard. Because FHWA regulates peak noise level, the Ldn is assumed to be equivalent to the peak noise hour.

Sources: (FTA, 2006; EPA, 1974; FHWA, 2006)

The California Department of Health Services Office of Noise Control has studied the correlation of noise levels and their effects on various land uses. Land use and noise compatibility criteria for Inyo County have been developed from the California Office of Noise Control Land Use Compatibility Matrix for Community Noise Exposure. Maximum acceptable noise levels for various land uses are shown in Table 2.13-4.

Table 2.13-4 Allowable Ambient Noise Exposure for Various Land Uses in Inyo County

Land Use	Suggested Maximum Ldn
Residential	60
Transient lodging	60
Schools, libraries, churches, and hospitals	60
Playgrounds and parks	70
Golf courses and water recreation	70
Commercial	70
Industrial and utilities	70

Source: (Inyo County, 2001)

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2.13.2 Environmental Impacts

2.13.2.1 Checklist

Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
A) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
B) Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
C) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
D) Result in 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 2 miles of a public airport or public use airport, expose people residing or working in the project corridor to excessive noise levels?	☐	☐	☐	☒
F) For a project within the vicinity of a private airstrip, expose people residing or working in the project corridor to excessive noise levels?	☐	☐	☐	☒

2.13.2.2 Discussion

A) Would the project expose 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?

Construction

Construction activities necessary to complete the bridge replacement would generate a considerable amount of noise. Noise from vehicles, earth-moving operations, and heavy equipment would result in elevated ambient and intermittent noise levels in the project vicinity. Noise impacts from construction depend on the noise generated by various pieces of equipment, timing and duration of noise-generating activities, the distance between construction noise sources and noise-sensitive receptors, and the noise environment in which the proposed project would be constructed. Noise generated during the construction period

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would vary on a day-to-day basis, depending on the specific activities being undertaken at any given time.

Heavy construction equipment that would be used during construction of the proposed project may generate maximum noise levels up to approximately 83 dBA at a distance of 50 feet (FHWA, 2006). Noise levels attenuate at a rate of approximately 6 dBA per doubling of distance from the noise source. Sensitive receptors in the project vicinity conservatively include a residence located 650 feet from the roadway realignment and over 1,000 feet away from bridge replacement activities. Maximum noise levels at the nearest sensitive receptor is expected to reach 61 dBA during ground clearing activities associated with construction of the realigned roadway.

Construction noise levels would periodically exceed the County's allowable ambient noise exposure level for residential land uses within approximately 750 feet of ground clearing activities; however, grading activities would not be localized or stationary. As grading activities move further from receptors, noise levels would decrease. Although maximum (L_{max}) construction noise may exceed 60 dBA at the nearest receptor, construction noise would not exceed the County's L_{dn} threshold, which is an average of noise generated over a 24-hour time period. Construction would be temporary, and noise would be intermittent because construction would be limited to day light hours and equipment would not be active for the entire day. Construction activities within 750 feet of the receptor would last only a few days. The receptor is over 1,000 feet away from the proposed bridge. The noise generated during construction would not exceed noise standards and the impact would be less than significant.

Noise from truck traffic on Walker Creek Road during construction would be periodic and temporary. The impact would be less than significant.

Operation

Ongoing use of the realigned roadway and bridge after it is constructed would not generate any new noise because the realigned road and replaced bridge would not change the use of Walker Creek Road and bridge. The impact from noise during operation and maintenance would be less than significant.

B) Would the project expose persons to or generation of excessive groundborne vibration or groundborne noise levels?

Groundborne vibrations could be generated during bridge installation and grading of the realigned roadway due to the use of construction equipment and the presence of truck traffic. The bridge footings would be located as close as 5 feet from the Los Angeles Aqueduct. Geotechnical bridge design considerations, including footing placement and depth, would ensure construction of the bridge does not impact the Los Angeles Aqueduct liner (Kleinfelder, 2015). Vibration impacts could reach 0.089 PPV at a distance of 25 feet (FTA, 2006) during the use of jackhammers, rock drillers, and excavators, which would be perceptible to humans, but would not create structural damage to the Los Angeles Aqueduct. The vibrations would attenuate before reaching the nearest sensitive receptor and would not cause significant

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annoyance. Vibrations would be localized, intermittent, and temporary. The impact from vibration would, therefore, be less than significant.

C) Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity. Use of the bridge and road after construction would be the same as existing use and no new noise would be anticipated. No impact would occur.

D) Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction

Temporary noise impacts from construction would depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, the distance between construction noise sources and noise-sensitive receptors, and the noise environment in which the proposed project would be constructed. Noise generated during the construction period would vary on a day-to-day basis, depending on the specific activities being undertaken at any given time. Loaded trucks traveling with construction materials and equipment would generate periodic noise. Maximum noise levels at sensitive receptors would occur during clearing and grading of the realigned roadway (approximately two weeks). Noise from clearing and grading could reach 61 dBA at a distance of 650 feet (the location of the nearest sensitive receptor). Noise from bridge construction would be quieter than noise from ground clearing and would be comparable to noise levels generated by traffic on U.S. 395. Construction would not be stationary and noise would reduce as equipment moves farther from receptors. Construction noise would be intermittent, temporary, and limited to daytime hours. Project construction would not create a substantial increase in ambient noise levels. The impact would be less than significant.

Operation

Ongoing use and maintenance of the bridge would not change from the existing use and maintenance. No impact to ambient noise levels would occur after construction is complete.

E) For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 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 project site is not located within 2 miles of a public airport or within an existing or projected airport land use plan (Inyo County, 2001). 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?

The proposed project is not located in the vicinity of any active private airstrips. The Olancho Airfield site is commercially developed and no longer in use (Madsen, 1999). The Grant Airstrip is also no longer in use. No impact would occur.

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2.14 POPULATION AND HOUSING

2.14.1 Environmental Setting

2.14.1.1 Population

Inyo County had an estimated population of 18,026 in 2017 (USCB, 2017). Population in the project vicinity is sparse and the nearest residents are approximately 0.2-mile (650 feet) northeast of the project site in unincorporated Inyo County.

2.14.1.2 Housing

Inyo County has approximately 9,571 housing units (USCB, 2017). Housing in Inyo County and the vicinity of the project site is sparse. The closest residence to the project site is located approximately 650 feet away. Several residences are located beyond 1,000 from the project site. The housing units in the project vicinity are privately owned, on private land.

2.14.2 Environmental Impacts

2.14.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., 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?	☐	☐	☐	☒

2.14.2.2 Discussion

A) Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The proposed project would not directly or indirectly induce growth in the area. The new bridge would more efficiently and safely accommodate existing traffic volumes and would increase safety for pedestrians. The new bridge and roadway would not provide an extension to new destinations beyond the current extent of the existing road. Construction is expected to last up to 5 months utilizing a construction crew of 12 workers. The additional construction workers would not require new or additional housing. No impact would occur.

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B and C) Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace any housing or people. Residents located west of the project site travelling to U.S. 395 may experience temporary traffic delays during construction, lasting not more than 30 minutes. These delays would not require the construction of replacement housing. No impact would occur.

2.15 PUBLIC SERVICES

2.15.1 Environmental Setting

2.15.1.1 Fire Protection Services

The Olancha Cartago Fire Department provides fire suppression, emergency medical, ambulance transport, and rescue services for the project site (Olancha, 2018). The Olancha Cartago Fire Department is located within the unincorporated community of Olancha. BLM has a fire station in Olancha that provides mutual aid support to other fire departments when there is a need (USDOT and Caltrans, 2015).

2.15.1.2 Police Protection Services

The Inyo County Sheriff's Department provides law enforcement services to Inyo County. The station closest to the project site is located in Lone Pine, approximately 24.5 miles north. The Olancha Cartago Fire Department also provides law enforcement through a Joint Agency Specialized Enforcement Detail under a Memorandum of Understanding with the Inyo County Sheriff (Olancha, 2018).

2.15.1.3 Schools

No schools are located in the general vicinity of the project site. The nearest school to the project site is Lone Pine High School, located 25 miles north of the project in the town of Lone Pine.

2.15.1.4 Parks

The project site is located 2 miles east of the Inyo National Forest where there are hiking and camping areas.

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2.15.2 Environmental Impacts

2.15.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
(i) Fire protection?	☐	☐	☐	☒
(ii) Police protection?	☐	☐	☐	☒
(iii) Schools?	☐	☐	☐	☒
(iv) Parks?	☐	☐	☐	☒
(v) Other public facilities?	☐	☐	☐	☒

2.15.2.2 Discussion

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:

i) Fire protection?

Construction of the proposed bridge would take approximately 20 weeks and would pose a minor risk of igniting a wildfire. Emergency response would be provided by the Olancha Cartago Fire Department, which staffs a fire station within 1 mile from the proposed project site. The project would not affect response times or service ratios for the fire station and there would be no need to create a new or altered fire station. There would be no impact.

ii) Police protection?

The nearest police station is located in Lone Pine, over 24 miles away from the project site. The proposed project would not result in an increase in demand for police protection because the proposed project would not create any new development in the area. The proposed project would have no impact on existing police protection or necessitate additional police services.

iii) Schools?

The nearest schools to the project site are located in the town of Lone Pine, more than 25 miles to the northeast. The proposed project would not result in an increase in demand for schools because the proposed project would not create any new development in the area. The project would have no impact on schools.

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iv) Parks?

The proposed project would not construct parks or increase the demand for parks. The proposed project would not require the construction of additional parks and there would be no impact.

v) Other public facilities?

No other public facilities are located on the project site or in the vicinity of the proposed project. No impact would occur.

2.16 RECREATION

2.16.1 Environmental Setting

Walker Creek Road serves as one access point to the Inyo National Forest, which is located approximately two miles west of Walker Creek Road Bridge. The Inyo National Forest offers many recreational opportunities, including camping, hiking, wildlife viewing, and horseback riding. The eastern side of the Inyo National Forest, accessible from Walker Creek Road, provides opportunities for use of off-highway vehicles (USFS, 2015). BLM-managed land is located between the Inyo National Forest land and the Los Angeles Aqueduct, which provides recreation opportunities for off-highway vehicles, wildlife viewing, and horseback riding.

2.16.2 Environmental Impacts

2.16.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) 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) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

2.16.2.2 Discussion

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?

Walker Creek Road provides access to a small portion of the Inyo National Forest and does not serve as a primary access point. Vehicle traffic along Walker Creek Road Bridge would not

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increase as a result of the realigned road or replacement bridge because the proposed project would not change access to recreational areas at the western extent of the road. The project site does not provide any recreational opportunities. No impact would occur to recreational facilities.

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 would not construct or necessitate the construction of any recreational facilities. No impact would occur.

2.17 TRANSPORTATION AND TRAFFIC

2.17.1 Environmental Setting

2.17.1.1 Road Infrastructure

Walker Creek Road is an unpaved, two-way road that connects U.S. 395 with several destinations west of U.S. 395. Access is provided to residences, the Los Angeles Aqueduct, a high-voltage electricity transmission line, Inyo National Forest, and Wild Burro Rescue and Preservation Project. The existing bridge on Walker Creek Road that crosses over the Los Angeles Aqueduct is the only access point in the area. The nearest alternate access points are at Fall Road, approximately 1.4 miles north, and where the Los Angeles Aqueduct passes under U.S. 395, approximately 1.9 miles south.

2.17.1.2 Traffic Volume

Walker Creek Road is defined as a local (rural) road (USDOT, 2015). The average daily traffic (ADT) for a local road is defined as less than 400 vehicles (USDOT, 2013). The ADT on Walker Creek Road is estimated at 50 vehicles (Caltrans, 2014). The County requires a minimum level of service (LOS) of C on all roadways (Inyo County, 2001).

2.17.1.3 Air Traffic

The former Grant Airport, an unpaved private airstrip, is located just southeast and adjacent to the project site. The former Olancho Airfield is approximately 4,200 feet east of the existing Walker Creek Road Bridge (Madsen, 1999). Neither private airstrip is currently in use.

2 IS CHECKLIST

2.17.2 Environmental Impacts

2.17.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
B) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
C) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
D) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
E) Result in inadequate emergency access?	☐	☐	☒	☐
F) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

2 IS CHECKLIST

2.17.2.2 Discussion

A) Would the project 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?

Construction

Truck traffic leading to the project site along Walker Creek Road would temporarily increase during construction of the proposed replacement bridge and roadway approaches. A total of 170 vehicle trips from construction equipment and vehicles would occur over the 5-month construction period. Hauling of waste materials would result in 105 truck trips (5 trucks per day for 21 days) to a disposal facility. The project site is located in a rural part of Inyo County. Existing traffic volume on Walker Creek Road consists of vehicles traveling to the single residence west of the Los Angeles Aqueduct and recreationists traveling to the Inyo National Forest. Daily vehicle traffic would have to exceed 320 trips a day to exceed the County standard of LOS C. The total traffic generated over the entire 5-month construction period is well below 320 daily trips that are allowable under the County LOS standard. The increase in truck traffic along Walker Creek Road, due to construction of the proposed project, would not impact the LOS due to the minimal traffic required for construction and low existing traffic volume. Therefore, no substantial conflict with a local or regional traffic plan would occur. The impact from construction traffic would be less than significant.

Operation

Traffic through the project site would not increase after construction of the proposed project because the proposed project would not affect land use or create new sources of vehicle traffic in the area. No conflict with a local or regional traffic plan would occur. The project would have no impact.

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

Construction

As described under Traffic Impact A) above, vehicle and truck traffic along Walker Creek Road would increase as a result of construction, but would not exceed the LOS standard for the roadway. Daily truck trips would have to exceed 320 trips a day to exceed LOS C. The total traffic generated over the 5-month construction period is well below 320 daily trips that are allowable under the County LOS standard. Consequently, the LOS on the local roadways would not decrease to unacceptable levels. The impact from construction traffic on LOS would be less than significant.

Operation

Traffic through the project site would not increase after construction of the proposed replacement bridge because the bridge replacement and realigned road would change the land

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uses in the area or cause new development. Therefore, the LOS on the local roadways would not decrease. No impact would occur.

C) Would the project 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 not impact air traffic patterns as it would not be located near any airport or airstrip and would not involve tall structures that impede on airspace.

D) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction

The existing Walker Creek Road Bridge would remain open during construction. Cones and traffic controls would be implemented during any roadway delays that may occur. The traffic controls would not increase hazards on the existing roadway during construction. The minor increase in truck traffic would not pose a hazard to vehicles traveling along Walker Creek Road. No impact would occur during project construction.

Operation

The realigned eastern approach road would introduce a sharper curve to Walker Creek Road and would provide a more gradual turn on the western approach road, as shown in Figure 1.2-2. The sharper curve on the eastern approach road is designed per Caltrans specifications and would not substantially increase traffic hazards due to the low speed of traffic on the road. The proposed replacement bridge would meet current design specifications and would be wider than the existing bridge. The proposed bridge would be safer for vehicle traffic. The impact during operation of the proposed project would be less than significant.

E) Would the project result in inadequate emergency access?

Construction

The existing Walker Creek Road Bridge would remain open during construction. Traffic delays of up to 30 minutes could occur at intermittent intervals during certain construction activities such as placement of precast concrete using cranes, as described in Section 1.2.3.9 in the Project Description. Traffic controls (e.g., flaggers) would be in place during traffic delays to allow emergency access through the site, if needed. With traffic controls, the impact to emergency access during project construction would be reduced to less than significant.

Operation

The proposed replacement bridge would be wider than the existing bridge, permitting easier emergency access. No impact to emergency access would occur.

F) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

There is no public transportation or bicycle routes along Walker Creek Road. No impact to policies, plans, or programs supporting alternative transportation would occur.

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2.18 UTILITIES AND SERVICE SYSTEMS

2.18.1 Environmental Setting

2.18.1.1 Water Supply

There are no municipal water facilities in the vicinity due to the rural location and limited number of residences in the area.

2.18.1.2 Sewer and Drainage

There is no sewer or stormwater drainage infrastructure located in the vicinity. The natural drainage of Walker Creek has been truncated by the Los Angeles Aqueduct. The Walker Creek drainage flows into a detention basin west of the Los Angeles Aqueduct and north of Walker Creek Road. Under high stormwater conditions, the water drains through a pipe into the Los Angeles Aqueduct, as described in detail under Section 2.10, Hydrology and Water Quality.

2.18.1.3 Solid Wastes

The landfill closest to the project site is the Lone Pine Landfill at the end of Substation Road in Lone Pine, California. The landfill is managed by the Inyo County Waste Management Department. The facility is permitted to accept general non-hazardous waste. The closest facility permitted to accept hazardous waste is the Bishop Sunland Solid Waste Site on the south side of Bishop, which is permitted to accept non-friable asbestos and contaminated soil (CalRecycle, 2016) .

2.18.2 Environmental Impacts

2.18.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
B) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
C) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

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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 that 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?	☐	☐	☐	☒

2.18.2.2 Discussion

A) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Construction

During construction of the proposed project a portable toilet would be transported to the project site for use by construction workers. The portable toilet waste generated during the construction period would be trucked to an appropriate wastewater treatment facility. The wastewater generated during construction would be treated to the standards set forth by the Lahontan Regional Water Quality Control Board (RWQCB). The impact on wastewater treatment requirements would be less than significant.

Operation

Use and maintenance of the proposed bridge would not generate wastewater. No impact to wastewater treatment requirements would occur.

B) Would the project 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?

Construction

Water would be required for construction activities. Construction of the proposed project would require up to one million gallons of water over the 5-month construction period. Water would be obtained from a local source and trucked to the project site. The proposed project would not require construction of new or expanded water treatment facilities. The construction period would last approximately 5 months with up to 12 construction workers on the project site at any one time. The portable toilet waste generated during construction would be minimal and would not substantially affect the capacity of wastewater treatment facilities. The proposed project would not require expansion of existing water or wastewater treatment facilities. The impact would be less than significant.

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Operation

Use and maintenance of the proposed bridge would be similar in scope to use and maintenance of the existing bridge. The proposed project would not change the existing needs for water or wastewater treatment service in the vicinity because the proposed project would not result in land use change or new development. No impact would occur.

C) Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project involves construction of a new bridge over the Los Angeles Aqueduct and realignment of Walker Creek Road. The project would increase the impervious surfaces by approximately 0.15 acre. Surface runoff from these impervious surfaces would flow into two drainages adjacent to the LADWP patrol roads. One culvert would be constructed on either side of the bridge approach to accommodate the drainages that flow from north to south, paralleling the aqueduct. The culverts would be constructed within the footprint of the realigned roadway and would not result in additional ground disturbance or impacts. The impact on stormwater drainage facilities would be less than significant.

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

Construction

Construction of the proposed project would require up to one million gallons of water over the 5-month construction period. Water would be obtained from an existing source and trucked to the site daily. Expanded or new entitlements are not needed for this short duration. The impact to existing entitlements and water resources would be less than significant.

Operation

Use and maintenance of the proposed bridge would be similar in scope to existing use and maintenance, and would have no impact on available water supply resources.

E) Would the project 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?

See response to Utilities Impact A), above. The impact from construction would be less than significant.

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

Construction

Grading activities during construction of the proposed project would result in an excess of 1,100 cubic yards of materials. This material could be disposed of at the Lone Pine Landfill. This landfill is estimated to close in 2052 and has approximately one million cubic yards of capacity remaining (CalRecycle, 2016). The landfill has adequate capacity to accommodate the disposal of materials from the proposed project. The impact would be less than significant.

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Operation

Use and maintenance of the proposed bridge would be similar in scope to existing use and maintenance. The proposed project would not generate solid waste during operation. No impact would occur.

G) Comply with federal, state, and local statutes and regulations related to solid waste?

Construction

The waste material generated during construction would be transported to an appropriate disposal location in accordance with federal, state, and local statutes and regulations related to solid waste. No impact from disposal of materials associated with the proposed project would occur.

Operation

Use and maintenance of the proposed bridge would be similar in scope to existing use and maintenance, and would have no impact on landfills.

2.19 ENERGY CONSERVATION

2.19.1 Environmental Setting

Petroleum

The petroleum used in California originates both within and outside of the state. In 2017, approximately 56 percent of the crude oil that California receives originates from foreign sources; however, California produces 31 percent of the crude oil consumed within the state (CEC, 2017). Most petroleum, or crude oil, produced in California is used in on-road motor vehicles and is refined within California to meet state-specific formulations required by the CARB. The primary uses of petroleum fuels are gasoline and diesel for passenger vehicles, transit, rail vehicles, and construction equipment; and fuel oil for industry and electrical power generation. In 2012, approximately 25 percent of diesel fuel used in California was consumed by “off highway” construction, farming equipment, military and railroad vehicles and equipment, and marine crafts (CEC, 2012).

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2.19.2 Environmental Impacts

2.19.2.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Result in wasteful, inefficient, and unnecessary consumption of energy?	☐	☐	☒	☐
B) Result in a substantial increase in demand upon energy resources in relation to projected supplies?	☐	☐	☒	☐
C) Result in longer overall distances between jobs and housing?	☐	☐	☐	☒

2.19.2.2 Discussion

A) Would the project result in wasteful, inefficient, and unnecessary consumption of energy?

Construction

The construction equipment and vehicles that would be used during construction of the proposed project would consume energy via combustion of petroleum products, including gas, diesel, and motor oil. Consumption of energy during construction would be temporary, lasting 5 months, and would cease after the proposed project is completed. Indirect energy use would be required to make the materials and components used in construction. Indirect energy use includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing.

Fuel use would be consistent with typical construction and manufacturing practices and would not require excessive or wasteful use of energy. Construction activities would not reduce or interrupt existing fuel or electricity delivery systems due to insufficient supply. The impact would be less than significant.

Operation

The proposed bridge and realigned roadway approaches would require minimal to no maintenance. Maintenance activities would likely be reduced from the maintenance of the existing bridge because the new bridge would meet current design standards. Bridge and road maintenance would not require excessive or wasteful use of energy. The impact would be less than significant.

B) Would the proposed project result in a substantial increase in demand upon energy resources in relation to projected supplies?

The replacement bridge and realigned road would not create a substantial new demand for energy. Construction equipment and vehicles would be powered using gasoline or diesel; however, construction would last approximately 5 weeks and would require a crew of approximately 20 people. The short duration of construction and small crew size would not

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substantially increase demand for gasoline or diesel within California. The impact would be less than significant.

C) Would the proposed project result in longer overall distances between jobs and housing?

Construction of the proposed replacement bridge would enable any residences to the west of the Los Angeles Aqueduct to safely access U.S. 395. Construction would be completed using a local workforce. The proposed project would not increase the distance between jobs and housing in the vicinity. There would be no impact.

2.20 MANDATORY FINDINGS OF SIGNIFICANCE

2.20.1 Environmental Impacts

2.20.1.1 Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) 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) 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) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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2.20.1.2 Discussion

A) Would 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?

Construction of the proposed project has the potential to result in significant impacts to migratory birds, bats, and special-status species covered by the federal or state endangered species acts. Potential impacts include loss of habitat through vegetation removal, crushing of individuals, nest destruction, or nest failure. The proposed project would impact 1.52 ~~1.23~~ acres of Mojave desert tortoise and Mohave ground squirrel habitat which would have a potentially significant impact on these two species. Implementation of Mitigation Measures BIO-1 through BIO-4 would ensure impacts to migratory birds and special status species are avoided and minimized. Implementation of Mitigation Measure BIO-5 would compensate for the loss of 1.52 ~~1.23~~ acres of habitat of Mojave desert tortoise and Mohave ground squirrel habitat. The combined effect of the mitigation measures would fully mitigate the potential impacts of the proposed project and ensure that the project would not degrade the quality of the environment, restrict the range of endangered species, or reduce habitat for fish, wildlife and plant communities. The impact of the project would be less than significant with mitigation.

The Los Angeles Aqueduct transects the project site and is the only eligible cultural resource within the project vicinity. The Los Angeles Aqueduct is important as an example of a water conveying system because of the association with master engineer William Mulholland. The proposed project would span the Los Angeles Aqueduct and avoid all impacts on the Los Angeles Aqueduct. There are no other important examples of major Californian prehistoric or historic periods in the project vicinity. The proposed project would not eliminate important examples of the major periods of California history or prehistory. See also Section 2.6.2 above for impacts on cultural resources and mitigation for inadvertent discoveries of cultural resources. No impact to important examples of California history or prehistory would occur.

B) Would 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.)

Overview

Two projects have the potential to combine with the proposed project to result in cumulative impacts on the same resources: the LADWP Western Patrol Road and the Olancho Cartago Four-Lane Project (Four-Lane Project). The LADWP Western Patrol Road involves construction of an unpaved road that parallels the western edge of the Los Angeles Aqueduct for the entire extent of the aqueduct within the project vicinity.

The Four-Lane Project would convert 12.6 miles of the existing U.S. 395 from a two-lane conventional highway into a four-lane expressway or partial conventional four-lane highway. The Four-Lane Project is located within 1 mile of the project site and is proposed to start

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construction in Fall 2020 and be completed by Fall 2022. There are no other past, present, or reasonably foreseeable future projects in the vicinity of the project site. Impacts are discussed by environmental resource area.

Aesthetics

The project site is not visible from the location of the Four-Lane Project and would not impact visual quality or scenic resources within the same viewshed as the Four-Lane Project. The proposed project would not contribute to a cumulative impact on aesthetics because the two projects would not affect the same visual resources. No cumulative impact would occur.

Air Quality

The proposed project and Four-Lane Project could be constructed at the same time and there is the potential for the proposed project and Four-Lane Project to have a cumulative impact on air quality as a result of fugitive dust emissions. The proposed project's contribution to the cumulative impact could be cumulatively considerable and therefore significant. The proposed project would implement Mitigation Measure AIR-1 to reduce fugitive dust emissions. With mitigation, the proposed project's impact on air quality would be less than cumulatively considerable. The cumulative impact would be less than significant with mitigation.

Due to the distance between the two projects and limited number of sensitive receptors in the area, the proposed project and Four-Lane Project would not have a cumulatively significant impact on localized dust and diesel emissions impact to sensitive receptors. The cumulative impacts to air quality from localized air emissions would be less than significant.

Biological Resources

Construction of both the proposed project and the Four-Lane Project would affect natural vegetation communities and the habitat of various special-status and rare plant and animal species. The cumulative loss of habitat from the two projects would be less than significant due to the presence of substantial areas of suitable habitat surrounding the projects and throughout the Owens Valley. Both projects have the potential to affect desert tortoise and Mohave ground squirrel in the area. Due to the limited number and distribution of desert tortoise and Mohave ground squirrel, the cumulative impact to these species would be significant and the proposed project's contribution to the cumulative impact would be cumulatively considerable. USFWS determined the proposed project to be not likely to adversely affect desert tortoise with the implementation of recommended conservation measures. Mitigation Measures BIO-1 and BIO-3, which incorporate the USFWS-recommended conservation measures, would reduce the impacts from the proposed project on desert tortoise and Mohave ground squirrel to less than cumulatively considerable. The cumulative impacts to biological resources would be less than significant with mitigation.

Cultural Resources

The proposed project would not impact known eligible resources and would not contribute to a cumulative impact to cultural resources. The proposed project and Four-Lane Project are both located in an area with high sensitivity for cultural and paleontological resources. The proposed

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project and Four-Lane Project could result in a cumulative impact on cultural and paleontological resources if both of the projects were to disturb previously undiscovered resources. The proposed project's impacts to these resources has the potential to be cumulatively considerable. Mitigation Measures CUL-1 and CUL-2 would reduce the impacts from the proposed project by requiring proper treatment of any discovered cultural or paleontological resources. The project's contribution to a potentially significant cumulative impact would be less than significant with mitigation.

Geology and Soils

The proposed project site is adjacent to the LADWP Western Patrol Road and approximately 1 mile from the location of the Four-Lane Project. Due to the distance between the proposed project and the Four-Lane Project, there would be no cumulative impact on geology and soils. There is potential for a cumulative impact on geology and soils if the proposed project and LADWP Western Patrol Road do not implement appropriate erosion control measures. The proposed project would require a NPDES permit and preparation of a SWPPP. Implementation of the SWPPP would reduce erosion from the proposed project to a less than significant level. The project's contribution to a potentially significant cumulative impact would be less than significant.

GHG Emissions

GHG emissions are of global concern. The cumulative global impact from production of GHG emissions is significant. CARB has considered this significant cumulative impact when setting the project-specific triggers for GHG emissions. The CARB threshold of 7,000 MTCO_{2e} is therefore a reasonable threshold for evaluating whether a project's contribution to GHG emissions would be cumulatively considerable. Because the GHG emissions from the proposed project would be well below the CARB threshold for GHG emissions, the proposed project's contribution to the cumulative impact would be less than cumulatively considerable. The impact would be less than significant.

Hazards and Hazardous Materials

There are no hazardous waste sites that the proposed project and Four-Lane Project would affect. The proposed project would use a small quantity of hazardous materials during construction. The potential spill of a small quantity of hazardous materials from the proposed project would not contribute to a cumulative impact with the Four-Lane Project due to the 1-mile distance between the projects; any spilled materials at the proposed project site would not transport to the Four-Lane Project site. No cumulative impact on hazards or hazardous materials would occur.

Hydrology and Water Quality

Temporary impacts to water quality may occur during construction of the proposed project and Four-Lane Project from erosion and sedimentation to waterways. No long-term impacts to stormwater, surface waters, or groundwater would occur as a result of the proposed project or Four-Lane Project. The project site and location of the Four-Lane Project are within the same watershed and impacts to water quality have the potential to be cumulative. Impacts to water

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quality from construction of the proposed project including erosion and sedimentation would be reduced by sediment and erosion control BMPs in the SWPPP. Stormwater treatment BMPs implemented as part of the SWPPP would reduce the potential impact from operation of the proposed bridge and roadway approaches. The proposed project's contribution to a cumulative impact on water quality would be less than cumulatively considerable due to implementation of the SWPPP water quality BMPs. The cumulative impacts to water quality would be less than significant.

Mineral Resources

Both the Four-Lane Project and proposed project would require aggregate for road construction. Both projects would obtain aggregate from existing sources of aggregate in the region. The cumulative impacts to mineral resources would be less than significant due to the limited quantity of aggregate required for both projects.

Noise

The proposed project is located a mile from the Four-Lane Project. Cumulative impacts to noise only result when two projects are located in very close proximity to one another and cumulatively result in increased local noise levels or vibration levels. Noise and vibration from the proposed project would not contribute to an increased noise level in the Four-Lane Project area; therefore, no cumulative impact on noise would occur.

Traffic and Transportation

The proposed project trucks and vehicles would access the work area via U.S. 395. The proposed project could be constructed at the same time as the Four-Lane Project. Construction of the Four-Lane Project has the potential to result in traffic delays and decrease the LOS. The proposed project's contribution to traffic delays would be less than cumulatively considerable due to the low total volume of vehicle and truck trips required during the 5-month duration of construction. The impact would be less than significant.

The LOS of U.S. 395 would increase after construction of U.S. 395 by increasing capacity to meet present and future traffic demands. The proposed project would not generate any additional traffic after construction is complete. No cumulative impact on traffic would occur during operation of the proposed project.

C) Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Construction of the proposed project would be limited to 5 months. Construction would also be limited in scope to the proposed roadway realignment and bridge. No human beings are located in the immediate vicinity or directly adjacent to the project site (within 500 feet or less) that could be exposed to excessive air emissions or noise levels that could cause a substantial adverse effect. The impact would be less than significant.

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4 LIST OF PREPARERS AND PERSONS CONTACTED

4.1 LIST OF PREPARERS

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4 LIST OF PREPARERS AND PERSONS CONTACTED

4.2.1 United States Fish and Wildlife Service

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APPENDIX A

Air Quality and Greenhouse Gases Support Information

Walker Creek
Great Basin UAPCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.15	Acre	0.15	6,664.68	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	54
Climate Zone	7			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 0.153 Paved area

Construction Phase - grad 8/1/18 - 8/17/18 const 8/18/18 - 12/31/18 pav 8/18/18 - 8/24/18 coat 12/17/18 - 12/31/18

Off-road Equipment -

Off-road Equipment - 2 cranes, 1 front end loader (rough terrain forklift); 1 flatbed trucks (off highway truck) 8 hr, 6 worker vehicles (other const equip) 2 hr/day

Off-road Equipment - 1 gradall (tractor etc); 1 motorgrader (grader); 2 excavators, 6 worker vehicles (other const equip) 2 hours; 1 water truck (off highway truck) 8 hours

Off-road Equipment - 5 dump trucks (Dumper), 4 concrete trucks (cement and motar mixers) 4 hours; 1 roller; 1 asphalt truck (off highway truck)

Trips and VMT - grading 24 mile haulign trip length, 1 mile other phases

On-road Fugitive Dust -

Grading - 3,190 cy cut, 2,080 fill, 1.4 acres disturbed

Architectural Coating - 0 sf interior, 6,665 sf exterior

Construction Off-road Equipment Mitigation - water 3x

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	3,332.00	6,665.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	9,997.00	0.00
tblConstructionPhase	NumDays	5.00	11.00
tblConstructionPhase	NumDays	100.00	96.00
tblConstructionPhase	NumDays	2.00	13.00
tblConstructionPhase	PhaseEndDate	9/10/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	1/7/2019	8/24/2018
tblConstructionPhase	PhaseStartDate	8/25/2018	12/17/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	8/18/2018
tblGrading	AcresOfGrading	6.50	1.40
tblGrading	MaterialExported	0.00	3,190.00
tblGrading	MaterialImported	0.00	2,080.00
tblLandUse	LandUseSquareFeet	6,534.00	6,664.68
tblOffRoadEquipment	HorsePower	16.00	97.00

tblOffRoadEquipment	HorsePower	162.00	255.00
tblOffRoadEquipment	HorsePower	174.00	81.00
tblOffRoadEquipment	HorsePower	100.00	89.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	LoadFactor	0.41	0.73
tblOffRoadEquipment	LoadFactor	0.40	0.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblTripsAndVMT	HaulingTripLength	20.00	24.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2265	1.9375	1.3412	2.5300e-003	0.0162	0.0984	0.1145	5.6000e-003	0.0907	0.0963	0.0000	228.6358	228.6358	0.0612	0.0000	229.9215
Total	0.2265	1.9375	1.3412	2.5300e-003	0.0162	0.0984	0.1145	5.6000e-003	0.0907	0.0963	0.0000	228.6358	228.6358	0.0612	0.0000	229.9215

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2265	1.9375	1.3412	2.5300e-003	0.0125	0.0984	0.1109	3.8800e-003	0.0907	0.0946	0.0000	228.6356	228.6356	0.0612	0.0000	229.9212
Total	0.2265	1.9375	1.3412	2.5300e-003	0.0125	0.0984	0.1109	3.8800e-003	0.0907	0.0946	0.0000	228.6356	228.6356	0.0612	0.0000	229.9212

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	22.40	0.00	3.16	30.71	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

[illegible]

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0338	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	8/1/2018	8/17/2018	5	13	
2	Building Construction	Building Construction	8/18/2018	12/31/2018	5	96	
3	Paving	Paving	8/18/2018	8/24/2018	5	5	
4	Architectural Coating	Architectural Coating	12/17/2018	12/31/2018	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 6,665 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	1.00	255	0.40
Grading	Graders	1	8.00	81	0.73
Grading	Off-Highway Trucks	1	8.00	400	0.38
Grading	Other Construction Equipment	6	2.00	171	0.42
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	2	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	400	0.38
Building Construction	Other Construction Equipment	6	2.00	171	0.42
Building Construction	Rough Terrain Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Dumpers/Tenders	1	7.00	97	0.37
Paving	Off-Highway Trucks	1	8.00	400	0.38
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	12	30.00	0.00	659.00	10.80	7.30	24.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	3.00	1.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9300e-003	0.0000	5.9300e-003	2.8100e-003	0.0000	2.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0235	0.2211	0.1439	2.5000e-004		0.0130	0.0130		0.0121	0.0121	0.0000	22.4550	22.4550	6.1700e-003	0.0000	22.5846
Total	0.0235	0.2211	0.1439	2.5000e-004	5.9300e-003	0.0130	0.0189	2.8100e-003	0.0121	0.0149	0.0000	22.4550	22.4550	6.1700e-003	0.0000	22.5846

3.2 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.7600e-003	0.0758	0.1210	2.9000e-004	6.7200e-003	1.3000e-003	8.0200e-003	1.8500e-003	1.2000e-003	3.0400e-003	0.0000	25.7193	25.7193	1.7000e-004	0.0000	25.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	1.3900e-003	0.0131	2.0000e-005	1.5500e-003	2.0000e-005	1.5700e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.3227	1.3227	9.0000e-005	0.0000	1.3247
Total	9.7800e-003	0.0772	0.1341	3.1000e-004	8.2700e-003	1.3200e-003	9.5900e-003	2.2600e-003	1.2100e-003	3.4700e-003	0.0000	27.0420	27.0420	2.6000e-004	0.0000	27.0476

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3100e-003	0.0000	2.3100e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0235	0.2211	0.1439	2.5000e-004		0.0130	0.0130		0.0121	0.0121	0.0000	22.4550	22.4550	6.1700e-003	0.0000	22.5846
Total	0.0235	0.2211	0.1439	2.5000e-004	2.3100e-003	0.0130	0.0153	1.1000e-003	0.0121	0.0132	0.0000	22.4550	22.4550	6.1700e-003	0.0000	22.5846

3.2 Grading - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.7600e-003	0.0758	0.1210	2.9000e-004	6.7200e-003	1.3000e-003	8.0200e-003	1.8500e-003	1.2000e-003	3.0400e-003	0.0000	25.7193	25.7193	1.7000e-004	0.0000	25.7229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	1.3900e-003	0.0131	2.0000e-005	1.5500e-003	2.0000e-005	1.5700e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.3227	1.3227	9.0000e-005	0.0000	1.3247
Total	9.7800e-003	0.0772	0.1341	3.1000e-004	8.2700e-003	1.3200e-003	9.5900e-003	2.2600e-003	1.2100e-003	3.4700e-003	0.0000	27.0420	27.0420	2.6000e-004	0.0000	27.0476

3.3 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1469	1.5817	1.0022	1.8600e-003		0.0812	0.0812		0.0747	0.0747	0.0000	170.0762	170.0762	0.0530	0.0000	171.1881
Total	0.1469	1.5817	1.0022	1.8600e-003		0.0812	0.0812		0.0747	0.0747	0.0000	170.0762	170.0762	0.0530	0.0000	171.1881

3.3 Building Construction - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-004	3.7300e-003	9.5300e-003	1.0000e-005	3.1000e-004	6.0000e-005	3.7000e-004	9.0000e-005	5.0000e-005	1.4000e-004	0.0000	0.9774	0.9774	1.0000e-005	0.0000	0.9775
Worker	7.6000e-004	1.0300e-003	9.6500e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1600e-003	3.0000e-004	1.0000e-005	3.2000e-004	0.0000	0.9768	0.9768	7.0000e-005	0.0000	0.9782
Total	1.4300e-003	4.7600e-003	0.0192	2.0000e-005	1.4500e-003	7.0000e-005	1.5300e-003	3.9000e-004	6.0000e-005	4.6000e-004	0.0000	1.9542	1.9542	8.0000e-005	0.0000	1.9558

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1469	1.5817	1.0022	1.8600e-003		0.0812	0.0812		0.0747	0.0747	0.0000	170.0760	170.0760	0.0530	0.0000	171.1879
Total	0.1469	1.5817	1.0022	1.8600e-003		0.0812	0.0812		0.0747	0.0747	0.0000	170.0760	170.0760	0.0530	0.0000	171.1879

3.3 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-004	3.7300e-003	9.5300e-003	1.0000e-005	3.1000e-004	6.0000e-005	3.7000e-004	9.0000e-005	5.0000e-005	1.4000e-004	0.0000	0.9774	0.9774	1.0000e-005	0.0000	0.9775
Worker	7.6000e-004	1.0300e-003	9.6500e-003	1.0000e-005	1.1400e-003	1.0000e-005	1.1600e-003	3.0000e-004	1.0000e-005	3.2000e-004	0.0000	0.9768	0.9768	7.0000e-005	0.0000	0.9782
Total	1.4300e-003	4.7600e-003	0.0192	2.0000e-005	1.4500e-003	7.0000e-005	1.5300e-003	3.9000e-004	6.0000e-005	4.6000e-004	0.0000	1.9542	1.9542	8.0000e-005	0.0000	1.9558

3.4 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0500e-003	0.0414	0.0275	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	5.2769	5.2769	1.6000e-003	0.0000	5.3104
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2500e-003	0.0414	0.0275	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	5.2769	5.2769	1.6000e-003	0.0000	5.3104

3.4 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.1000e-004	3.8500e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3900	0.3900	3.0000e-005	0.0000	0.3906
Total	3.0000e-004	4.1000e-004	3.8500e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3900	0.3900	3.0000e-005	0.0000	0.3906

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0500e-003	0.0414	0.0275	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	5.2769	5.2769	1.6000e-003	0.0000	5.3104
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2500e-003	0.0414	0.0275	6.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	5.2769	5.2769	1.6000e-003	0.0000	5.3104

3.4 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.1000e-004	3.8500e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3900	0.3900	3.0000e-005	0.0000	0.3906
Total	3.0000e-004	4.1000e-004	3.8500e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3900	0.3900	3.0000e-005	0.0000	0.3906

3.5 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4071
Total	0.0403	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4071

3.5 Architectural Coating - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.7000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0373	0.0373	0.0000	0.0000	0.0374
Total	3.0000e-005	4.0000e-005	3.7000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0373	0.0373	0.0000	0.0000	0.0374

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4071
Total	0.0403	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4071

3.5 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.7000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0373	0.0373	0.0000	0.0000	0.0374
Total	3.0000e-005	4.0000e-005	3.7000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0373	0.0373	0.0000	0.0000	0.0374

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

[illegible]

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.280839	0.105457	0.186358	0.169491	0.098236	0.011988	0.017132	0.108700	0.005759	0.000739	0.007473	0.001795	0.006033

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

[illegible]

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	7.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0338	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	7.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0338	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Walker Creek
Great Basin UAPCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.15	Acre	0.15	6,664.68	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	54
Climate Zone	7			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 0.153 Paved area

Construction Phase - grad 8/1/18 - 8/17/18 const 8/18/18 - 12/31/18 pav 8/18/18 - 8/24/18 coat 12/17/18 - 12/31/18

Off-road Equipment -

Off-road Equipment - 2 cranes, 1 front end loader (rough terrain forklift); 1 flatbed trucks (off highway truck) 8 hr, 6 worker vehicles (other const equip) 2 hr/day

Off-road Equipment - 1 gradall (tractor etc); 1 motorgrader (grader); 2 excavators, 6 worker vehicles (other const equip) 2 hours; 1 water truck (off highway truck) 8 hours

Off-road Equipment - 5 dump trucks (Dumper), 4 concrete trucks (cement and motar mixers) 4 hours; 1 roller; 1 asphalt truck (off highway truck)

Trips and VMT - grading 24 mile haulign trip length, 1 mile other phases

On-road Fugitive Dust -

Grading - 3,190 cy cut, 2,080 fill, 1.4 acres disturbed

Architectural Coating - 0 sf interior, 6,665 sf exterior

Construction Off-road Equipment Mitigation - water 3x

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	3,332.00	6,665.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	9,997.00	0.00
tblConstructionPhase	NumDays	5.00	11.00
tblConstructionPhase	NumDays	100.00	96.00
tblConstructionPhase	NumDays	2.00	13.00
tblConstructionPhase	PhaseEndDate	9/10/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	1/7/2019	8/24/2018
tblConstructionPhase	PhaseStartDate	8/25/2018	12/17/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	8/18/2018
tblGrading	AcresOfGrading	6.50	1.40
tblGrading	MaterialExported	0.00	3,190.00
tblGrading	MaterialImported	0.00	2,080.00
tblLandUse	LandUseSquareFeet	6,534.00	6,664.68
tblOffRoadEquipment	HorsePower	16.00	97.00

tblOffRoadEquipment	HorsePower	162.00	255.00
tblOffRoadEquipment	HorsePower	174.00	81.00
tblOffRoadEquipment	HorsePower	100.00	89.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	LoadFactor	0.41	0.73
tblOffRoadEquipment	LoadFactor	0.40	0.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblTripsAndVMT	HaulingTripLength	20.00	24.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	10.4134	49.7237	36.6266	0.0860	2.2227	2.4878	4.4189	0.7900	2.2911	2.8317	0.0000	8,407.8887	8,407.8887	1.9330	0.0000	8,448.4820
Total	10.4134	49.7237	36.6266	0.0860	2.2227	2.4878	4.4189	0.7900	2.2911	2.8317	0.0000	8,407.8887	8,407.8887	1.9330	0.0000	8,448.4820

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	10.4134	49.7237	36.6266	0.0860	1.6659	2.4878	3.8621	0.5258	2.2911	2.5676	0.0000	8,407.8887	8,407.8887	1.9330	0.0000	8,448.4820
Total	10.4134	49.7237	36.6266	0.0860	1.6659	2.4878	3.8621	0.5258	2.2911	2.5676	0.0000	8,407.8887	8,407.8887	1.9330	0.0000	8,448.4820

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	25.05	0.00	12.60	33.44	0.00	9.33	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1849	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1849	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	8/1/2018	8/17/2018	5	13	
2	Building Construction	Building Construction	8/18/2018	12/31/2018	5	96	
3	Paving	Paving	8/18/2018	8/24/2018	5	5	
4	Architectural Coating	Architectural Coating	12/17/2018	12/31/2018	5	11	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 6,665 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	1.00	255	0.40
Grading	Graders	1	8.00	81	0.73
Grading	Off-Highway Trucks	1	8.00	400	0.38
Grading	Other Construction Equipment	6	2.00	171	0.42
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	2	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Off-Highway Trucks	1	8.00	400	0.38
Building Construction	Other Construction Equipment	6	2.00	171	0.42
Building Construction	Rough Terrain Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	4.00	9	0.56
Paving	Dumpers/Tenders	1	7.00	97	0.37
Paving	Off-Highway Trucks	1	8.00	400	0.38
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	12	30.00	0.00	659.00	10.80	7.30	24.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	3.00	1.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9128	0.0000	0.9128	0.4331	0.0000	0.4331			0.0000			0.0000
Off-Road	3.6127	34.0135	22.1331	0.0382		1.9938	1.9938		1.8557	1.8557		3,808.0573	3,808.0573	1.0469		3,830.0419
Total	3.6127	34.0135	22.1331	0.0382	0.9128	1.9938	2.9066	0.4331	1.8557	2.2887		3,808.0573	3,808.0573	1.0469		3,830.0419

3.2 Grading - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1427	11.2201	12.5398	0.0447	1.0635	0.2000	1.2634	0.2915	0.1839	0.4754		4,365.276 4	4,365.276 4	0.0294		4,365.893 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1603	0.1820	1.9537	3.0800e-003	0.2464	2.4000e-003	0.2488	0.0654	2.2100e-003	0.0676		234.5550	234.5550	0.0156		234.8835
Total	1.3029	11.4021	14.4935	0.0478	1.3099	0.2024	1.5123	0.3569	0.1861	0.5430		4,599.831 4	4,599.831 4	0.0450		4,600.777 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3560	0.0000	0.3560	0.1689	0.0000	0.1689			0.0000			0.0000
Off-Road	3.6127	34.0135	22.1331	0.0382		1.9938	1.9938		1.8557	1.8557	0.0000	3,808.057 3	3,808.057 3	1.0469		3,830.041 9
Total	3.6127	34.0135	22.1331	0.0382	0.3560	1.9938	2.3498	0.1689	1.8557	2.0246	0.0000	3,808.057 3	3,808.057 3	1.0469		3,830.041 9

3.2 Grading - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1427	11.2201	12.5398	0.0447	1.0635	0.2000	1.2634	0.2915	0.1839	0.4754		4,365.276 4	4,365.276 4	0.0294		4,365.893 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1603	0.1820	1.9537	3.0800e-003	0.2464	2.4000e-003	0.2488	0.0654	2.2100e-003	0.0676		234.5550	234.5550	0.0156		234.8835
Total	1.3029	11.4021	14.4935	0.0478	1.3099	0.2024	1.5123	0.3569	0.1861	0.5430		4,599.831 4	4,599.831 4	0.0450		4,600.777 2

3.3 Building Construction - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0612	32.9523	20.8787	0.0388		1.6917	1.6917		1.5563	1.5563		3,905.768 7	3,905.768 7	1.2159		3,931.303 0
Total	3.0612	32.9523	20.8787	0.0388		1.6917	1.6917		1.5563	1.5563		3,905.768 7	3,905.768 7	1.2159		3,931.303 0

3.3 Building Construction - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0113	0.0750	0.1236	2.3000e-004	6.5600e-003	1.2100e-003	7.7800e-003	1.8600e-003	1.1200e-003	2.9800e-003		22.5192	22.5192	1.7000e-004		22.5227
Worker	0.0160	0.0182	0.1954	3.1000e-004	0.0246	2.4000e-004	0.0249	6.5400e-003	2.2000e-004	6.7600e-003		23.4555	23.4555	1.5600e-003		23.4884
Total	0.0273	0.0932	0.3190	5.4000e-004	0.0312	1.4500e-003	0.0327	8.4000e-003	1.3400e-003	9.7400e-003		45.9747	45.9747	1.7300e-003		46.0110

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0612	32.9523	20.8787	0.0388		1.6917	1.6917		1.5563	1.5563	0.0000	3,905.7687	3,905.7687	1.2159		3,931.3030
Total	3.0612	32.9523	20.8787	0.0388		1.6917	1.6917		1.5563	1.5563	0.0000	3,905.7687	3,905.7687	1.2159		3,931.3030

3.3 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0113	0.0750	0.1236	2.3000e-004	6.5600e-003	1.2100e-003	7.7800e-003	1.8600e-003	1.1200e-003	2.9800e-003		22.5192	22.5192	1.7000e-004		22.5227
Worker	0.0160	0.0182	0.1954	3.1000e-004	0.0246	2.4000e-004	0.0249	6.5400e-003	2.2000e-004	6.7600e-003		23.4555	23.4555	1.5600e-003		23.4884
Total	0.0273	0.0932	0.3190	5.4000e-004	0.0312	1.4500e-003	0.0327	8.4000e-003	1.3400e-003	9.7400e-003		45.9747	45.9747	1.7300e-003		46.0110

3.4 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6199	16.5387	10.9979	0.0235		0.7928	0.7928		0.7317	0.7317		2,326.6993	2,326.6993	0.7034		2,341.4700
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6985	16.5387	10.9979	0.0235		0.7928	0.7928		0.7317	0.7317		2,326.6993	2,326.6993	0.7034		2,341.4700

3.4 Paving - 2018**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1229	0.1395	1.4978	2.3600e-003	0.1889	1.8400e-003	0.1908	0.0501	1.6900e-003	0.0518		179.8255	179.8255	0.0120		180.0774
Total	0.1229	0.1395	1.4978	2.3600e-003	0.1889	1.8400e-003	0.1908	0.0501	1.6900e-003	0.0518		179.8255	179.8255	0.0120		180.0774

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6199	16.5387	10.9979	0.0235		0.7928	0.7928		0.7317	0.7317	0.0000	2,326.6993	2,326.6993	0.7034		2,341.4700
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6985	16.5387	10.9979	0.0235		0.7928	0.7928		0.7317	0.7317	0.0000	2,326.6993	2,326.6993	0.7034		2,341.4700

3.4 Paving - 2018**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1229	0.1395	1.4978	2.3600e-003	0.1889	1.8400e-003	0.1908	0.0501	1.6900e-003	0.0518		179.8255	179.8255	0.0120		180.0774
Total	0.1229	0.1395	1.4978	2.3600e-003	0.1889	1.8400e-003	0.1908	0.0501	1.6900e-003	0.0518		179.8255	179.8255	0.0120		180.0774

3.5 Architectural Coating - 2018**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	7.3196	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102

3.5 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.3400e-003	6.0700e-003	0.0651	1.0000e-004	8.2100e-003	8.0000e-005	8.2900e-003	2.1800e-003	7.0000e-005	2.2500e-003		7.8185	7.8185	5.2000e-004		7.8295
Total	5.3400e-003	6.0700e-003	0.0651	1.0000e-004	8.2100e-003	8.0000e-005	8.2900e-003	2.1800e-003	7.0000e-005	2.2500e-003		7.8185	7.8185	5.2000e-004		7.8295

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	7.3196	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102

3.5 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.3400e-003	6.0700e-003	0.0651	1.0000e-004	8.2100e-003	8.0000e-005	8.2900e-003	2.1800e-003	7.0000e-005	2.2500e-003		7.8185	7.8185	5.2000e-004		7.8295
Total	5.3400e-003	6.0700e-003	0.0651	1.0000e-004	8.2100e-003	8.0000e-005	8.2900e-003	2.1800e-003	7.0000e-005	2.2500e-003		7.8185	7.8185	5.2000e-004		7.8295

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.280839	0.105457	0.186358	0.169491	0.098236	0.011988	0.017132	0.108700	0.005759	0.000739	0.007473	0.001795	0.006033

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005
Unmitigated	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005
Total	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005
Total	0.1849	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		3.0000e-005	3.0000e-005	0.0000		3.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

APPENDIX B

Biological Resources Support Information

Special-status Plants Species Known or with Potential to Occur in the Biological Study Area (BSA)

Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Tundra thread moss (<i>Pohlia tundrae</i>)	CRPR 2B.3	Acidic, humus soils in alpine tundra, along stream banks, path banks, and heavy metal mine tailings at various elevations.	No suitable habitat (humus soils) in the BSA. Known from higher elevations in the Sierra Nevada Mountains.
Fish Slough milk-vetch (<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>)	FT CRPR 1B.1	Found only in Fish Slough a desert spring-fed wetland ecosystem, consisting of alkali habitat	No suitable habitat in the BSA.
Ramshaw Meadows abronia (<i>Abronia alpina</i>)	FC CRPR 1B.1	Meadows and forest edges in lodgepole forests.	No suitable habitat in the BSA.
Dark red onion (<i>Allium atrorubens</i> var. <i>cristatum</i>)	CRPR 4.3	Sandy soils at elevations between 3,937 and 6,889 ft in the eastern Sierra Nevada and desert mountains.	Low likelihood to occur, most reported locations are from higher elevations within sagebrush scrub not chenopod scrub.
Horn's milk-vetch (<i>Astragalus hornii</i> var. <i>hornii</i>)	CRPR 1B.1	Salty flats, lakeshores, alkali sink and wetland-riparian habitats.	No suitable habitat in the BSA.
Kern Plateau milk-vetch (<i>Astragalus lentiginosus</i> var. <i>kernensis</i>)	CRPR 1B.2	Meadows in subalpine forests.	No suitable habitat in the BSA.
Naked milk-vetch (<i>Astragalus serenoii</i> var. <i>shockleyi</i>)	CRPR 2B.2	Open, dry, alkaline gravelly clay east of the Sierra Nevada within sagebrush scrub, shadscale scrub, or pinyon-juniper woodlands at elevations of 3,772–7,546 ft.	Low likelihood to occur, most reported locations are from higher elevations.
Tulare rockcress (<i>Boechera tularensis</i>)	CRPR 1B.3	Higher elevations (7,874-10,499 ft) in the southern Sierra Nevada on rocky slopes in montane and subalpine habitats.	No suitable habitat in the BSA.
Upswept moonwort (<i>Botrychium ascendens</i>)	CRPR 2B.3	Moist meadows and open woodlands near streams or seeps in yellow pine forests at elevations of 4,921-10,499 ft.	No suitable habitat in the BSA.
Scalloped moonwort (<i>Botrychium crenulatum</i>)	CRPR 2B.2	Meadows, freshwater marshes, bogs and fens in yellow pines forests, wetlands and wetland/riparian communities.	No suitable habitat in the BSA.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Common moonwort (<i>Botrychium lunaria</i>)	CRPR 2B.3	Meadows in lodgepole forests, subalpine forests, and wetland/riparian communities.	No suitable habitat in the BSA.
Mingan moonwort (<i>Botrychium minganense</i>)	CRPR 2B.2	Meadows and open forest along streams or around seeps in yellow pine forests.	No suitable habitat in the BSA.
Inyo County star tulip (<i>Calochortus excavatus</i>)	CRPR 1B.1 BLMS	Alkaline, mesic conditions in meadows and seeps in chenopod scrub communities, at elevations between 3,773 and 6,562 ft.	No suitable habitat (alkali mesic conditions) in the BSA.
Pygmy pussypaws (<i>Calyptidium pygmaeum</i>)	CRPR 1B.2	Sandy to gravelly soils in lodgepole and subalpine forest communities.	No suitable habitat in the BSA.
Kern Canyon clarkia (<i>Cordylanthus eremicus</i> ssp. <i>kernensis</i>)	CRPR 4.2	Dry slopes in foothill woodlands of the southern Sierra Nevada.	No suitable habitat in the BSA.
Kern Plateau bird's-beak (<i>Cordylanthus eremicus</i> ssp. <i>kernensis</i>)	CRPR 1B.3	Lodgepole forests, red fir forests, wetland/riparian communities in the southern Sierra Nevada.	No suitable habitat in the BSA.
Rosette cushion cryptantha (<i>Cryptantha circumscissa</i> var. <i>rosulata</i>)	CRPR 1B.2	Barren, granitic gravel soils in the higher elevations of the Sierra Nevada Mountains (elevations of 9,678-11,975 ft).	No suitable habitat in the BSA.
Ripley's spring parsley (<i>Cymopterus ripleyi</i> var. <i>saniculoides</i>)	CRPR 1B.2	Found on gravelly, sandy, carbonate substrates within Joshua tree woodland and Mojavean desert scrub at elevations between 3,281 and 5,249 ft.	No suitable habitat (carbonate substrates) in the BSA.
Mojave tarplant (<i>Deinandra mohavensis</i>)	SE CRPR 1B.3	Moist sites, openings in chaparral, desert scrub, and woodlands at elevations from 1,509 to 5,249 ft. in the southern Sierra Nevada, San Bernardino Mountains, and Peninsular ranges and the western edge of the Mojave Desert.	No suitable habitat (moist sites) in the BSA.
Mt. Whitney draba (<i>Draba sharsmithii</i>)	CRPR 1B.3	Alpine fell-fields in the high Sierra Nevada.	No suitable habitat in the BSA.
Pine Creek evening primrose (<i>Eremothera boothii</i> ssp. <i>alyssoides</i>)	CRPR 4.3	Sandy and gravelly soils within Great Basin scrub at elevations between 1,969 and 5,577 ft.	Known to occur in BSA - taxon found during botanical survey.
Booth's evening primrose (<i>Eremothera boothii</i> ssp. <i>boothii</i>)	CRPR 2B.3	Sandy flats and steep loose slopes in Joshua tree and pinyon/juniper woodlands at elevations from 2,953-7,874 ft.	No suitable habitat in the BSA.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Olancho Peak buckwheat (<i>Eriogonum wrightii</i> var. <i>olanchense</i>)	CRPR 1B.3	Subalpine forest and alpine fell-fields.	No suitable habitat in the BSA.
Bald daisy (<i>Erigeron calvus</i>)	CRPR 1B.1 BLMS	Sagebrush and desert scrub at elevations around $\pm$ 3,937 ft.	Low likelihood to occur, most observations are from higher elevations.
Sharsmith's stickseed (<i>Hackelia sharsmithii</i>)	CRPR 2B.3	Subalpine forest and alpine fell-fields.	No suitable habitat in the BSA.
Field ivesia (<i>Ivesia campestris</i>)	CRPR 1B.2	Subalpine forest and red fir forest.	No suitable habitat in the BSA.
Depressed standing-cypress (<i>Loeseliastrum depressum</i>)	CRPR 4.3	Sandy or gravelly soils or clay soils of flats, gentle slopes in Great Basin scrub, Mojavean desert scrub, Joshua tree woodlands and pinyon and juniper woodland at elevations between 4,003 and 6,890 ft.	Unlikely to occur. Not expected at the elevation of the BSA.
Copper-flowered bird's-foot trefoil (<i>Lotus oblongifolius</i> var. <i>cupreus</i>)	CRPR 1B.3	Meadows and edges and riparian areas in open lodgepole and red fir forests at elevations between 7,874 and 9,186 ft.	No suitable habitat in the BSA.
Father Crowley's lupine (<i>Lupinus padre-crowleyi</i>)	SR CRPR 1B.2	Decomposed granite in riparian areas, sagebrush scrub, lodgepole forests and red fir forests at elevations of 8,202 to 13,123 ft.	Not expected at the elevation of the BSA.
Creamy blazing star (<i>Mentzelia tridentata</i>)	CRPR 1B.3	Creosote bush scrub in the central Mojave Desert at elevations from 2,297 to 4,265 ft.	No suitable habitat in the BSA.
Bog sandwort (<i>Minuartia stricta</i>)	CRPR 2B.3	Granitic gravels, sandy wet spots, sedge meadows, fell-fields and wetland-riparian areas at alpine elevations (11,483-12,795 ft.) in the Sierra Nevada, White, and Inyo mountains.	No suitable habitat in the BSA.
Sweet-smelling monardella (<i>Monardella beneolens</i>)	CRPR 1B.3	Rocky granitic or metamorphic slopes in open conifer forests of the southern Sierra Nevada at elevations between 8,202-11,811 ft.	No suitable habitat in the BSA.
Nevada oryctes (<i>Oryctes nevadensis</i>)	CRPR 2B.1	Sandy soils and dunes in chenopod scrub and Mojavean desert scrub at elevations between 3,937 and 4,921 ft.	Unlikely to occur, dependent on deep, sandy soils.
Inyo phacelia (<i>Phacelia inyoensis</i>)	CRPR 1B.2 BLMS	Alkaline meadow margins and seeps in desert scrub at elevations between 3,609 and 10,499 ft.	No suitable habitat (alkaline meadows or seeps) in the BSA.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Charlotte's phacelia (<i>Phacelia nashiana</i>)	CRPR 1B.2	Sandy to rocky, granitic substrates on slopes in creosote bush scrub, Joshua tree woodlands, and pinyon-juniper woodlands below 7,874 ft. in the southern Sierra Nevada, east slope of the Tehachapi Mountains and along the western edge of the Mojave Desert.	No suitable habitat in the BSA.
Parish's popcorn flower (<i>Plagiobothrys parishii</i>)	CRPR 1B.1	Wet, alkaline soils around desert springs and mud flats at elevations between 2,461 and 7,251 ft.	No suitable habitat in the BSA.
Letterman's blue grass (<i>Poa lettermanii</i>)	CRPR 2B.3	Sandy soils around boulders in high alpine fell-fields in the southern Sierra Nevada, White, and Inyo mountains.	No suitable habitat in the BSA.
Bailey's greasewood (<i>Sarcobatus baileyi</i>)	CRPR 2B.3	Alkaline soils, dry lakes, washes, scrub, roadsides at elevations generally > 4,921 ft.	Not within elevation range.
Desert winged rockcress (<i>Sibara deserti</i>)	CRPR 4.3	Washes, steep hillsides, dry flats, scree, calcareous rubble, rocky bluffs, and exposed crevices in Mojavean desert scrub vegetation. Generally occurs between 1,132 and 4,265 ft.	Low potential to occur in the BSA; most observations are from lower elevations.
Owens Valley sidalcea (<i>Sidalcea covillei</i>)	SE CRPR 1B.1 BLMS	Alkaline flats and meadows in sagebrush scrub between 3,609 and 4,265 ft.	No suitable habitat (alkaline mesic conditions) in the BSA.
Cut-leaf checkerbloom (<i>Sidalcea multifida</i>)	CRPR 2B.3	Dry places in sagebrush scrub and yellow pine forest at elevations from 6,562 to 9,186 ft.	Not within elevation range.
Marsh arrow-grass (<i>Triglochin palustris</i>)	CRPR 2B.3	Freshwater wetlands, meadows, lake margins, and riparian areas in subalpine forests and alpine fell-fields.	No suitable habitat in the BSA.
Grey-leaved violet (<i>Viola pinetorum</i> ssp. <i>grisea</i>)	CRPR 1B.3	Mountain peaks and alpine zones, lodgepole forests, red fir forests, and subalpine forests.	No suitable habitat in the BSA.

^a Status Codes: Federal Threatened (FT); Federal Candidate (FC); State Endangered (SE); State Rare (SR); Bureau of Land Management Sensitive (BLMS); California Native Plant Society California Rare Plant Rank (CRPR) (1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere; 1B: Plants Rare, Threatened, or Endangered in California and elsewhere; 2A: Plants presumed extirpated in California, but common elsewhere; 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere; 3: Plants about which more information is needed; 4: Plants of limited distribution; Threat Ranks: 0.1-Seriously threatened in California; 0.2-Moderately threatened in California; 0.3-Not very threatened in California)

Sources: (BLM, 2015; CNPS, 2016) (CCH, 2015; USFWS, 2015)

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Special-status Wildlife Species Known or with Potential to Occur in the Biological Study Area (BSA)

Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Invertebrates			
Wong's springsnail (<i>Pyrgulopsis wongi</i>)	FSS	Seeps and spring-fed streams.	No suitable habitat in the BSA.
San Emigdio blue butterfly (<i>Plebulina emigdionis</i>)	FSS	Found in saltbush scrub in desert canyons and near washes. Four-wing saltbush (<i>Atriplex canescens</i>) is its host plant).	There is no suitable habitat (i.e., <i>Atriplex canescens</i>) in the BSA.
Fish			
Volcano Creek golden trout (<i>Oncorhynchus mykiss aguabonita</i>)	SSC FSS	Wide, shallow, and exposed streams with little riparian cover and sand, gravel and cobble bottoms on the Kern Plateau.	No suitable habitat in the BSA.
Owens tui chub (<i>Siphateles bicolor snyderi</i>)	FE SE	Clear, clean freshwater in the Owens Valley with cover and aquatic vegetation.	No suitable habitat in the BSA.
Owens pupfish (<i>Cyprinodon radiosus</i>)	FE SE FP	Warm, clear, shallow freshwaters in the Owens Valley and firm substrates for spawning.	No suitable habitat in the BSA.
Amphibians			
Inyo Mountains slender salamander (<i>Batrachoseps campi</i>)	SSC BLMS FSS	Riparian habitats, talus slopes, wetlands on west and east slopes of Inyo Mountains.	No suitable habitat in the BSA.
Yosemite toad (<i>Anaxyrus canorus</i>)	FT SSC FSS	Wet meadows and seasonal ponds in lodgepole pine and subalpine forests in the central high Sierra Nevada Mountains.	No suitable habitat in the BSA.
Southern mountain yellow-legged frog (<i>Rana muscosa</i>)	FE SE SSC FSS	High elevation lakes, ponds, springs and streams in the Sierra Nevada Mountains.	No suitable habitat in the BSA.
Reptiles			
Mojave desert tortoise (<i>Gopherus agassizii</i>)	FT, ST	Desert scrub, desert washes and Joshua tree woodlands with friable soil for burrow construction.	Low to moderate likelihood to occur, suitable habitat is present in the BSA and this species is known to occur in the vicinity of the BSA in low densities.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Northern sagebrush lizard (<i>Sceloporus graciosus graciosus</i>)	BLMS	Sagebrush and other shrublands in mountains (at higher elevations than western fence lizards).	Unlikely to occur in the BSA, typically occurs at higher elevations.
Birds			
California condor (<i>Gymnogyps californianus</i>)	FE SE	Forages in foothills and grasslands. Nests in shallow caves and rock crevices on cliffs where there is minimal disturbance.	Low likelihood to forage in the BSA.
western snowy plover (<i>Charadrius nivosus</i> ssp. <i>nivosus</i>)	FT SSC BCC	Breeds and nests adjacent to tidal waters of the Pacific Ocean.	No suitable habitat in the BSA.
Least bittern (<i>Ixobrychus exilis</i>) - nesting	BCC SSC	Marshes, swamps, and other wetland habitats with tules or similar emergent vegetation.	No suitable habitat in the BSA.
Golden eagle (<i>Aquila chrysaetos</i>) - nesting and wintering	FE SE FP	Forages in a wide variety of open and semi-open habitat types including grasslands, shrublands, woodlands, and coniferous forests. Often nests on cliffs bordering rivers, on tall trees, and occasionally on human-made structures. The nearest reported occurrence was recorded in 1977 approximately 7 miles from the BSA.	Low likelihood for this species to occur during foraging. The BSA offers no important wintering habitat nor suitable nesting habitat for this species.
Swainson's hawk (<i>Buteo swainsoni</i>) - nesting	ST BCC BLMS	Open areas including grasslands, sagebrush flats, juniper woodlands, and large openings in forests. Nest in trees, often willows or junipers.	No suitable nesting habitat in the BSA.
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>) - nesting	FT SSC BCC	Standing water, sandy shorelines and wetlands in the Great Basin.	No suitable habitat in the BSA.
Mountain plover (<i>Charadrius montanus</i>) - wintering	SSC BCC FSS	Generally flat areas nearly devoid of vegetation; predominantly short grass prairies, but also freshly plowed fields, grain fields, sod farms.	No suitable habitat in the BSA.
Burrowing owl (<i>Athene cunicularia</i>) – burrow sites and some wintering sites	BCC SCC BLMS	Deserts, open grasslands, shrublands, and other open areas such as vacant lots near human habitation or airports. Nests in abandoned mammal burrows. Uncommon east of the Sierra Nevada.	Very low likelihood to occur in the BSA. This species is unusual in the region and there are very limited suitably sized burrows or other refugia in the BSA.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Long-eared owl (<i>Asio otus</i>)- nesting	SCC	Nest in open woods (conifer, oak, riparian and pinyon-juniper) or woods adjacent to open areas (meadows, grasslands, shrublands). Known from Walker Creek in May-July (likely breeder) (Hunting, K., in Shuford and Gardali 2008).	No suitable nesting habitat in the BSA.
Loggerhead shrike (<i>Lanius ludovicianus</i>)- nesting	SSC BCC	Open habitats with shrubs and trees for perching and nesting.	Moderate likelihood for this species to occur and nest in the BSA.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)- nesting	FE SE SSC	Riparian woodlands.	No suitable habitat in the BSA.
Le Conte's thrasher (<i>Toxostoma lecontei</i>)	SCC BCC	Desert shrublands, mesquite bosques, and Joshua tree woodlands.	Moderate potential to occur. Suitable nesting habitat is available in the BSA. Species is known to nest north and south of the site.
Yellow-breasted chat (<i>Icteria virens</i>) – nesting	SSC	Riparian thickets near watercourses.	No suitable habitat in the BSA.
Yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>) - nesting	SSC	Nest in marshes with tall emergent vegetation.	No suitable habitat in the BSA.
Mammals			
Pallid bat (<i>Antrozous pa</i>)	SSC BLMS FSS	Wide variety of habitats including grasslands, sagebrush and juniper woodlands, preferably near water. Use narrow crevices in caves, mines, buildings and, less often, rock or debris piles and hollow trees for roosts. They use abandoned buildings, rock overhangs, and bridges for night roosts.	Moderate potential to occur. Potential roosting habitat could exist under the existing bridge.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SCT SSC BLMS FSS	Many habitats including desert scrub, pinyon-juniper and pine forests. Uses caves, abandoned mines, buildings, and tunnels as roosts.	Moderate likelihood to occur. No roosting habitat is present in the BSA. Potential foraging habitat in the BSA.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Spotted bat (<i>Euderma maculatum</i>)	SSC BLMS	Forests, fields, deserts, marshes, riparian areas and dry shrub-steppe grasslands. Roost in crevices in cliffs and canyon walls, often near water.	Low likelihood to occur. No roosting habitat is present in the BSA. Potential foraging habitat in the BSA.
Yuma myotis (<i>Myotis yumanensis</i>)	BLMS	Uses a wide variety of habitats, but closely associated with water. Establish large colonies in buildings, mines, caves and bridges.	Moderate likelihood to occur. Potential roosting habitat could exist under the existing bridge.
Mohave ground squirrel (<i>Xerospermophilus mohavensis</i>)	ST BLMS	Desert scrub in the Mojave Desert; prefers sandy to gravelly soils.	There is suitable habitat in the BSA for this species, which is known to occur to the north and south. Potential burrows were observed during surveys but could also be white-tailed antelope ground squirrel.
Owens Valley vole (<i>Microtus californicus vallicola</i>)	SSC BLMS	Meadows, seeps, and other wetland habitats.	No suitable habitat in the BSA.
Sierra Nevada red fox (<i>Vulpes vulpes necator</i>)	ST FSS	Various habitats in the Sierra Nevada Mountains, require dense vegetation and rocky areas for cover and den sites.	No suitable habitat in the BSA.
California wolverine (<i>Gulo gulo</i>)	ST FP FSS	High elevation habitats.	No suitable habitat in the BSA.
Fisher - West Coast DPS (<i>Pekania pennanti</i>)	FPT SCT SSC BLMS FSS	Mid- to late-seral coniferous forests and deciduous riparian habitats with high percent canopy closure.	No suitable habitat in the BSA.
American badger (<i>Taxidea taxus</i>)	SSC	Open areas with friable soils in variety of habitats including grasslands, shrublands, woodlands, and forests.	Moderate to High potential to occur in the BSA. There is suitable habitat and a badger skull was found during surveys; however no burrows were observed.

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Species	Status ^a	Habitat Requirements	Potential to Occur/Comments
Desert bighorn sheep (<i>Ovis canadensis nelsoni</i>)	FP BLMS FSS	Steep and rocky open terrain in desert mountains.	This subspecies of bighorn sheep is known from the Coso Range but would be unlikely to occur in the BSA.
Sierra Nevada bighorn sheep (<i>Ovis canadensis sierrae</i>)	FE SE FP	Steep and rocky open terrain in alpine, alpine dwarf scrub, chaparral, and chenopod scrub habitats on the crest and along east side of the Sierra Nevada Mountains.	No potential to occur. The BSA are outside of the range of the Sierra Nevada bighorn sheep.
desert kit fox (<i>Vulpes macrotis arsipus</i>)	SSC	Inhabits sparsely vegetated scrub habitats and native or annual grasslands with abundant rodent populations.	Moderate potential to occur in the BSA. Signs of kit fox (subspecies not determined) were observed in the BSA.
^a Status Codes: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC); Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); State Candidate (SC, SCE, SCT), Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); USFWS Bird of Conservation Concern (BCC); Bureau of Land Management Sensitive (BLMS); U.S. Forest Service Sensitive (FSS)			

Sources: (USFWS, 2016a; USFWS, 2016b; BLM, 2014)



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262



In Reply, Refer To:
FWS-INYO-17B0358-17I0857

May 26, 2017
Sent by Email

Angela Calloway
Environmental Office Chief
California Department of Transportation, District 9
500 South Main Street, Bishop, California 93514

Attention: Ben Downard, Trisha Moyer

Subject: Walker Creek Road Bridge Project, Inyo County, California

Dear Ms. Calloway:

On December 21, 2016, we (the U.S. Fish and Wildlife Service) received the California Department of Transportation's (Caltrans) request for concurrence that the subject project is not likely to adversely affect the federally threatened desert tortoise (*Gopherus agassizii*). Your request and our response are made pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended.

The Inyo County Public Works Department, in co-operation with Caltrans and the Federal Highway Administration, are proposing to decommission County Bridge 48C0039 and approximately 1000 feet of Walker Creek Road, south of Olancho, California. A new bridge and connecting road would be constructed approximately 300 feet south of the existing structure, resulting in the loss of approximately 1 acre of desert tortoise habitat.

Desert tortoises have been observed in this region, but the project area is on the edge of the species range in this portion of the desert. Caltrans performed protocol surveys of the proposed project area and did not observe desert tortoises or their sign. Based on these factors, we believe desert tortoises are unlikely to occupy the project site, but may occur at low densities in the surrounding region.

In the biological assessment that accompanied the initial request for consultation, Caltrans proposed to implement numerous measures to avoid adverse effects to desert tortoises when implementing the project. These measures included the use of biologists to monitor construction activities, worker education programs, desert tortoise exclusion fencing, measures to avoid mortality from project vehicles, and noxious weed control. The proposed measures also included the use of "clearance surveys" which would relocate any desert tortoises found on the project site. After reviewing the initial request, we informed Caltrans that handling and relocating desert tortoises constitutes an adverse effect, and is inconsistent with a not likely to adversely affect

determination. We discussed this issue with your staff and agreed upon a revised set of conservation measures on May 11, 2017 (see appendix A). The primary change is to ensure that no desert tortoises will be handled during this project.

With full implementation of these revised conservation measures, we concur with your determination that this project is not likely to adversely affect the desert tortoise. We have reached this conclusion because the total extent of ground disturbance is small and the revised conservation measures should prevent take in the unlikely event that a desert tortoise is encountered during construction. No further consultation, pursuant to section 7(a)(2) of the Act, is required at this time. If the proposed action or its effects on listed species changes, we recommend that you contact us immediately to determine whether additional consultation would be appropriate.

If you have any questions, please contact Jeffrey Ackley (jeffrey_ackley@fws.gov, 760-322-2070, extension 420).

Sincerely,

FOR
Ken Corey
Assistant Field Supervisor

APPENDIX A

The following on-site conservation measures will be implemented:

- CM 1. Caltrans will perform pre-project surveys and use desert tortoise exclusion fencing (see avoidance measures below) to ensure that desert tortoises do not enter work areas.
- CM 2. A qualified desert tortoise biologist will conduct pre-construction surveys prior to ground disturbance, no less than 14 days prior to ground disturbance; these surveys will be performed at a level of intensity similar to a clearance survey that is sufficient to locate any desert tortoise, desert tortoise burrows, or other sign of recent occupancy within the project area; surveys will not involve handling desert tortoises, excavating burrows, or other activities that would constitute take; the purpose of the survey is to ensure no desert tortoises have established in the area since the protocol level surveys and before desert tortoise fence installation. If these surveys locate evidence of recent occupancy, Caltrans should contact the U.S. Fish and Wildlife Service (USFWS) to determine if additional consultation is needed prior to installation of fencing or other commencement of project activities.
- CM 3. If surveys do not identify evidence that work areas are occupied by desert tortoises, USFWS-approved desert tortoise exclusionary fencing will be installed around the perimeter of the PIA prior to construction start; desert tortoise fencing will be included on the detailed construction plans;
- CM 4. Vegetation removal will be minimized and vehicle travel will be confined to designated routes;
- CM 5. A qualified biologist will be present during all ground disturbing and construction activities to monitor for any desert tortoises that may have been missed during pre-construction surveys or that may have entered work sites through damaged exclusion fencing. The biological monitor will have the authority to stop work in the event that a desert tortoise is located within the work area. If this occurs, Caltrans should contact the USFWS to determine if additional consultation is needed prior to resuming construction activities;
- CM 6. **Worker Education Program** - The qualified biologist will provide a “Worker Educational Awareness Training” on the desert tortoise prior to construction start; the training will include:
 - a. Explanation of the avoidance and minimization measures for biological resources and the possible penalties for not adhering to them;

- b. General safety protocols, such as hazardous substance spill prevention and containment measures, fire prevention and protection measures, and speed limits;
- c. Explanation of the sensitivity and locations of the biological resources within and adjacent to work areas, and proper identification of these resources;
- d. Natural history information on the sensitive biological resources including information on physical characteristics, photographs, distribution, behavior, ecology, sensitivity to human activities, legal protection, reporting requirements, and conservation measures required for the project;
- e. Contact information for the biological monitors;
- f. Notification to all workers to report all observations of special-status species and their sign to the biological monitor;
- g. A training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and
- h. Information regarding the effects of predation on the desert tortoise by common ravens and other predators.

CM 7. All trash and debris will be disposed of in sealed containers and removed from the site at the end of each day;

CM 8. **“Look Before You Move”** –

- a. all employees and contractors on the project will look under vehicles and equipment for the presence of desert tortoise before moving the vehicle or equipment.
- b. If a desert tortoise is observed, no vehicles or equipment will be moved until the animal leaves voluntarily.
- c. If the animal is located under a vehicle or piece of equipment within the fenced, project work area, Caltrans will contact the USFWS to determine if additional consultation is required.
- d. All employees and contractors shall adhere to a “Do Not Touch” policy that applies to all workers on the project; and

CM 9. All workers will be advised that equipment and vehicles must remain within the designated work areas, to be provided and approved by a biological monitor prior to the start of construction.

CM 10. **Weed Control Measures -**

- a. The native seed mix will be from a Caltrans-certified non-native weed-free seed source;
- b. All fill materials used for project construction and erosion control will come from a certified weed-free source;
- c. Tools, equipment, and vehicles will be cleaned of soil and plant material before entering and leaving the worksite;
- d. Equipment will be washed prior to transportation to the PIA; and
- e. Equipment and vehicles will be inspected by the biologist to ensure no weed material is transported to the PIA.

APPENDIX C

Tribal Notification Information

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



September 17, 2015

Kari Sprengeler
ASM Affiliates, Inc.
10 State Street
Reno, CA 89501

Email to: ksprengeler@asmaffiliates.com

RE: SB 18 Consultation, Walker Creek Bridge Replacement, Inyo County.

Dear Ms. Sprengeler,

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above project.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. A *Sacred Lands File* search was not completed. Local governments should be aware that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address:
Katy.Sanchez@nahc.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

**Native American Tribal Consultation List
Inyo County
September 15, 2015**

Big Pine Band of Owens Valley THPO
Danelle Gutierrez Tribal Historic Preservation Officer
P.O. Box 700 Paiute
Big Pine , CA 93513
d.gutierrez@bigpinepaiute.org
(760) 938-2003, ext. 228
(760) 938-2942

Kern Valley Indian Council
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella , CA 93240
(661) 366-0497
(661) 340-0032 Cell

Southern Paiute
Kawaiisu
Tubatulabal
Koso
Yokuts

Big Pine Paiute Tribe of the Owens Valley
Shannon Romero, Chairperson
P. O. Box 700 Owens Valley Paiute
Big Pine , CA 93513
shann_romero@hotmail.com
(760) 938-2003

Kern Valley Indian Council
Robert Robinson, Co-Chairperson
P.O. Box 401
Weldon , CA 93283
brobinson@iwvisp.com
(760) 378-4575 Home
(760) 549-2131 Work

Tubatulabal
Kawaiisu
Koso
Yokuts

Bishop Paiute Tribe
Gerald Howard, Chairperson
50 Tu Su Lane Paiute - Shoshone
Bishop , CA 93514
(760) 873-3584

Lone Pine Paiute Shoshone Reservation
Mary Wuester, Chairwoman
P.O. Box 747
Lone Pine , CA 93545 Paiute
Shoshone
(760) 876-1034

Bishop Paiute Tribe
Raymond Andrews, THPO
50 Tu Su Lane Paiute - Shoshone
Bishop , CA 93514
gwest@ovcdc.com
(760) 920-0357 Cell
(760) 873-8435 ext 250

Timbisha Shoshone Tribe
George Gholoson, Chairperson
121 W. Line Street Western Shoshone
Bishop , CA 93514
george@timbisha.com
(760) 872-3614

Fort Independence Indian Community of Paiutes
Wendy Stine, Chairwoman
P.O. Box 67 Paiute
Independence , CA 93526
chairman@fortindependence.com
(760) 878-5160

Walker River Reservation
Melanie McFalls, Chairperson
P.O. Box 220 Northern Paiute
Schurz , NV 89427
(775) 773-2306

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3 and 65362.4 et seq. Walker Creek Bridge Replacement. Inyo County.



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Danielle Gutierrez
Tribal Historic Preservation Officer
The Big Pine Paiute of the Owens Valley
P.O. Box 700
Big Pine, CA 93513

Dear Ms. Gutierrez,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

Inyo County has contracted Panorama Environmental (Panorama) and ASM Affiliates, Inc. (ASM) to conduct cultural resource studies. The study area will include all of the areas anticipated to be impacted by bridge replacement and road realignment.

If you or any members of the Big Pine Paiute Tribe have any questions regarding this project, please contact the Project Manager, Kari Sprengeler at ASM Affiliates, by phone at 775-324-6789 or by email at ksprengeler@asmaffiliates.com, or Chantel Brown, Inyo County Public Works, at (760) 878-0201 or cbrown@inyocounty.us.

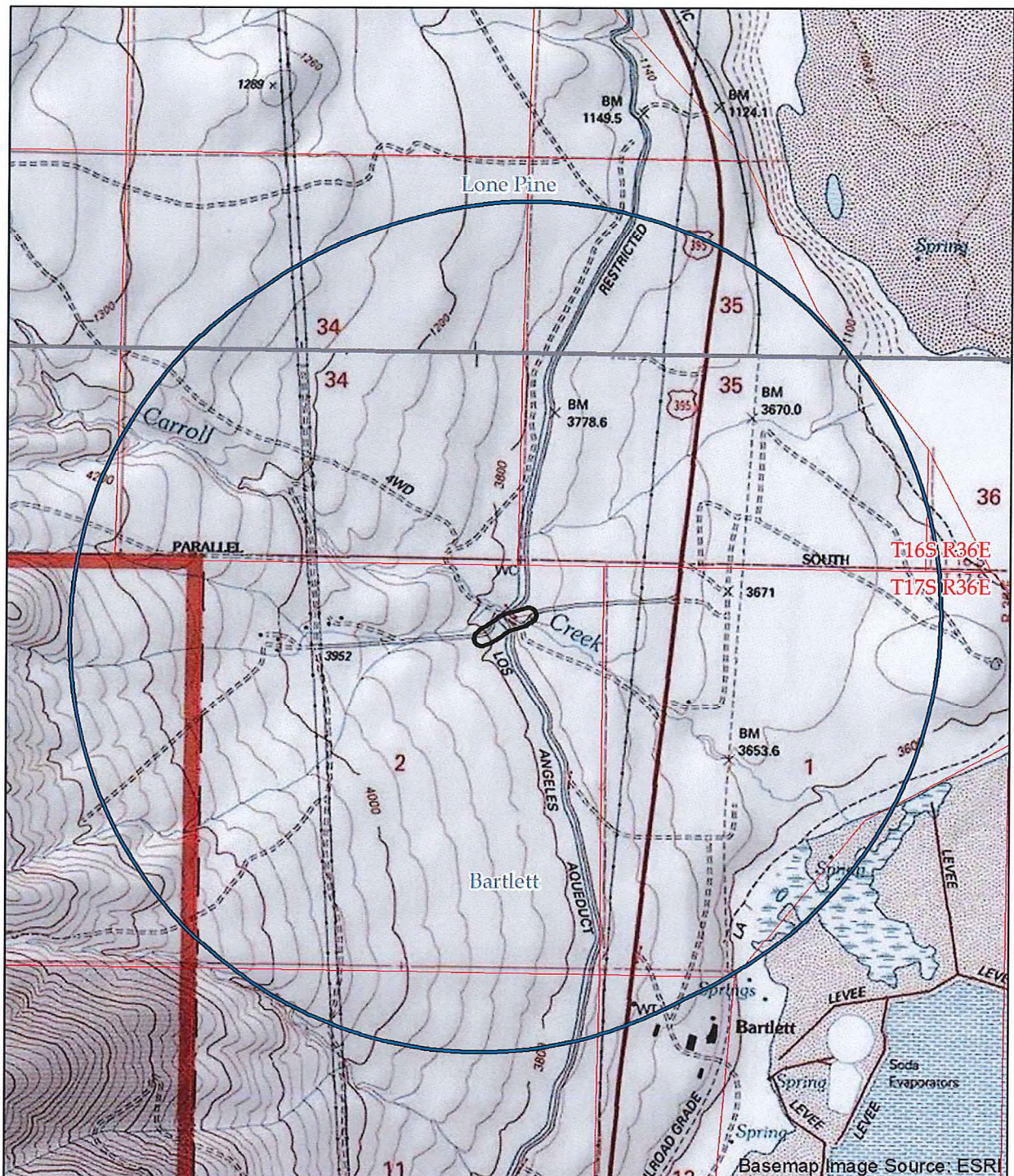
If you have any concerns or knowledge of cultural resources within the project area, please contact Caltrans District 9 Associate Archaeologist Trevor C. Pratt at (760) 872-3021 or by email at trevor.pratt@dot.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Chantel R. Brown".

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

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Kilometers

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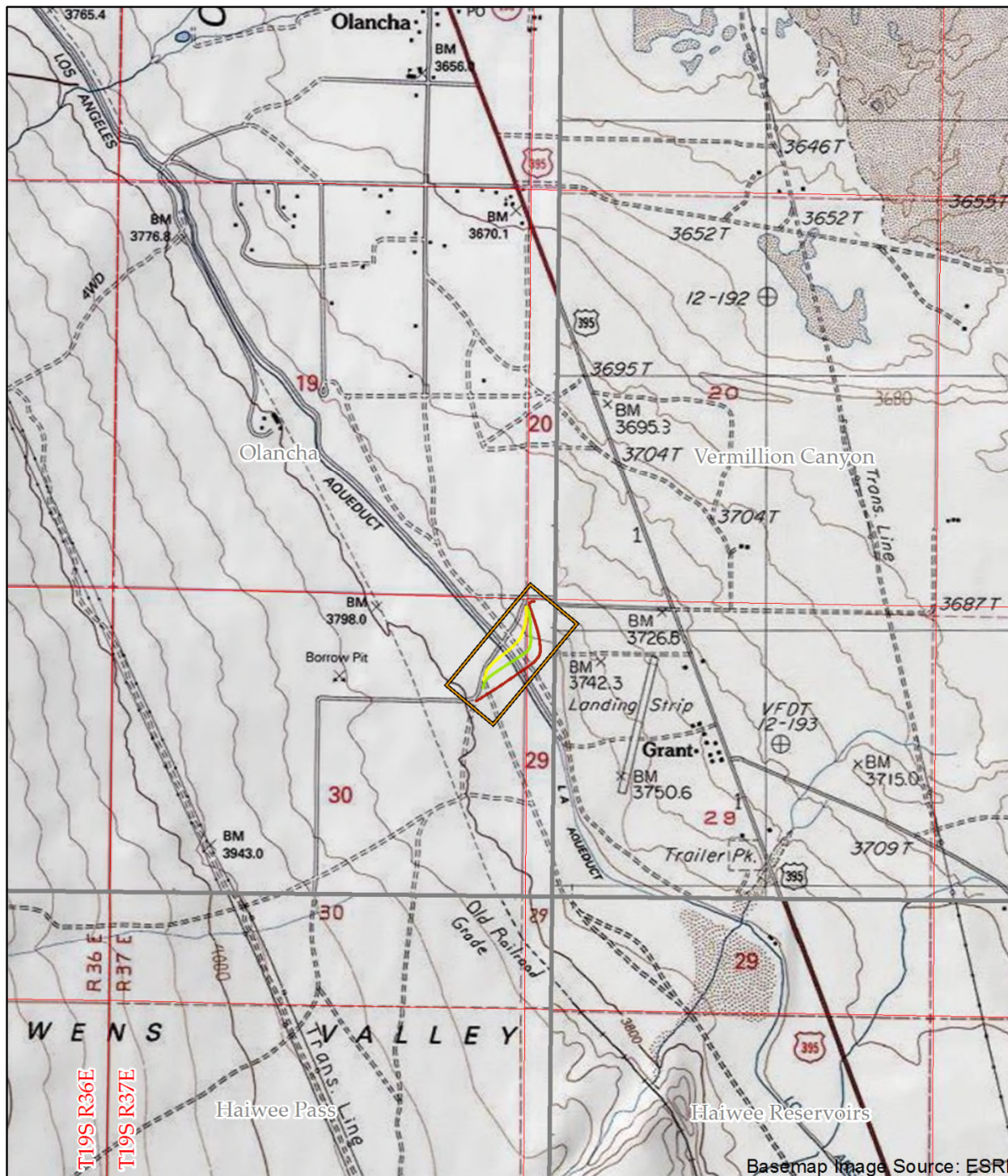


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NAD 83

UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



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NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
09/21/2015



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P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Shannon Romero
Chairperson
The Big Pine Paiute of the Owens Valley
P.O. Box 700
Big Pine, CA 93513

Dear Ms. Romero,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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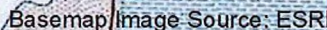
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Sincerely,

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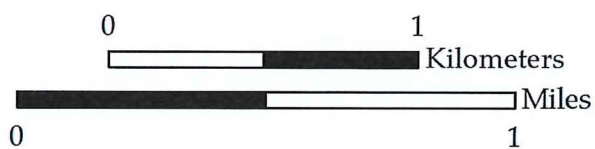
Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps

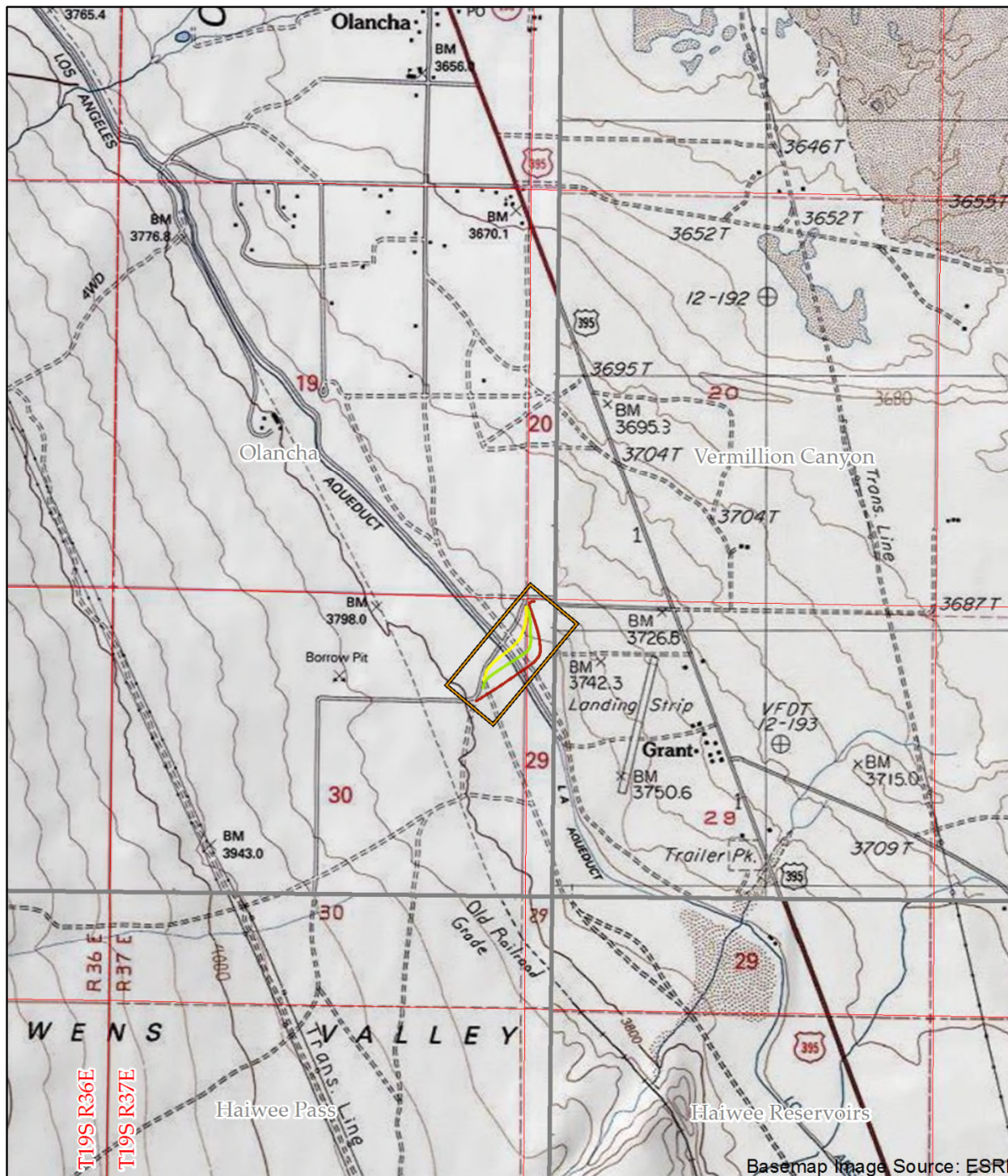


Carrol Creek Bridge Replacement - Records Search

-  APE
 Records Search Area
 Quad Boundary



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NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
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05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



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09/21/2015



DEPARTMENT OF PUBLIC WORKS
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INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Roberta Hunter
Secretary
The Big Pine Paiute of the Owens Valley
P.O. Box 700
Big Pine, CA 93513

Dear Ms. Hunter,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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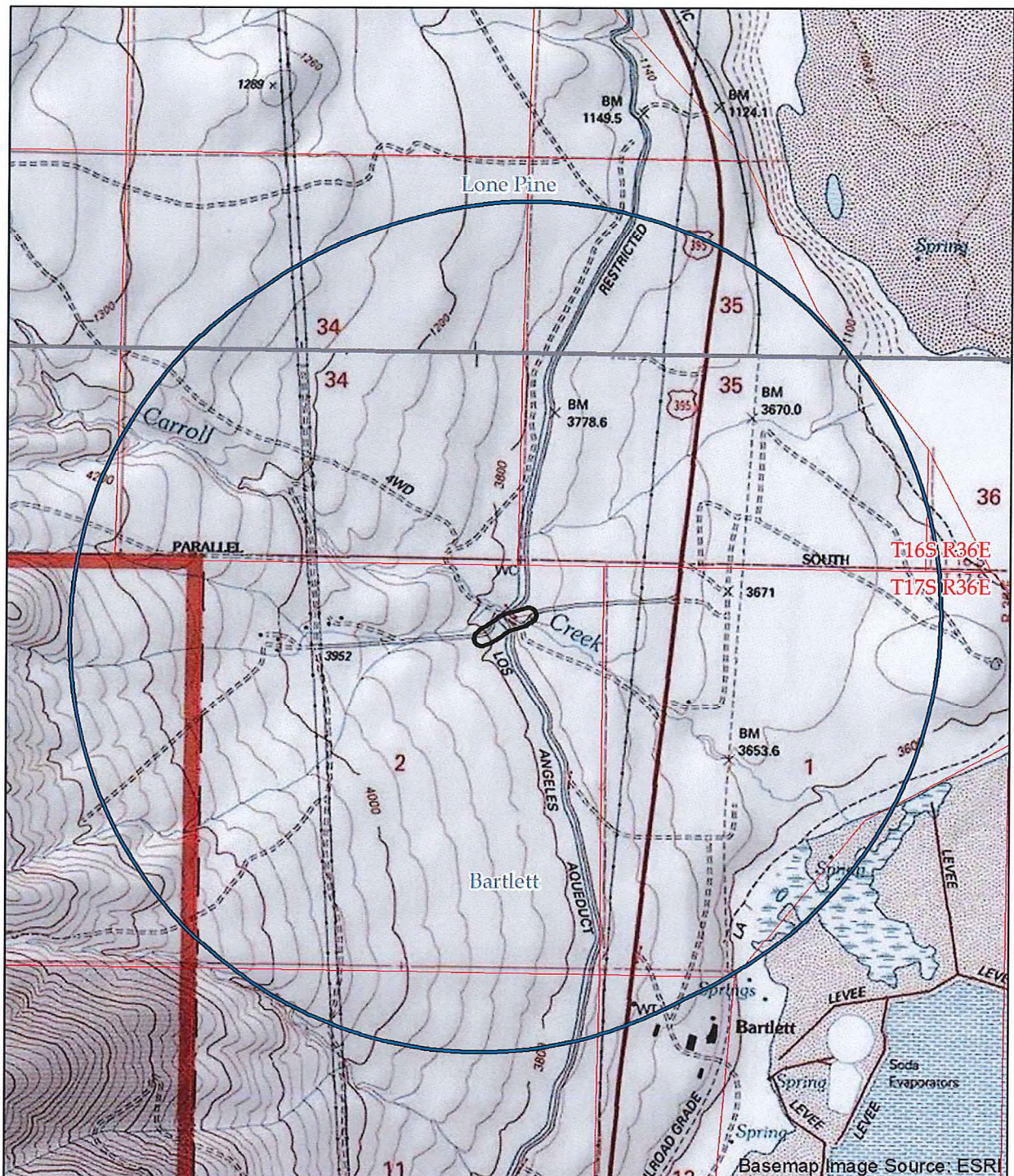
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Sincerely,

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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

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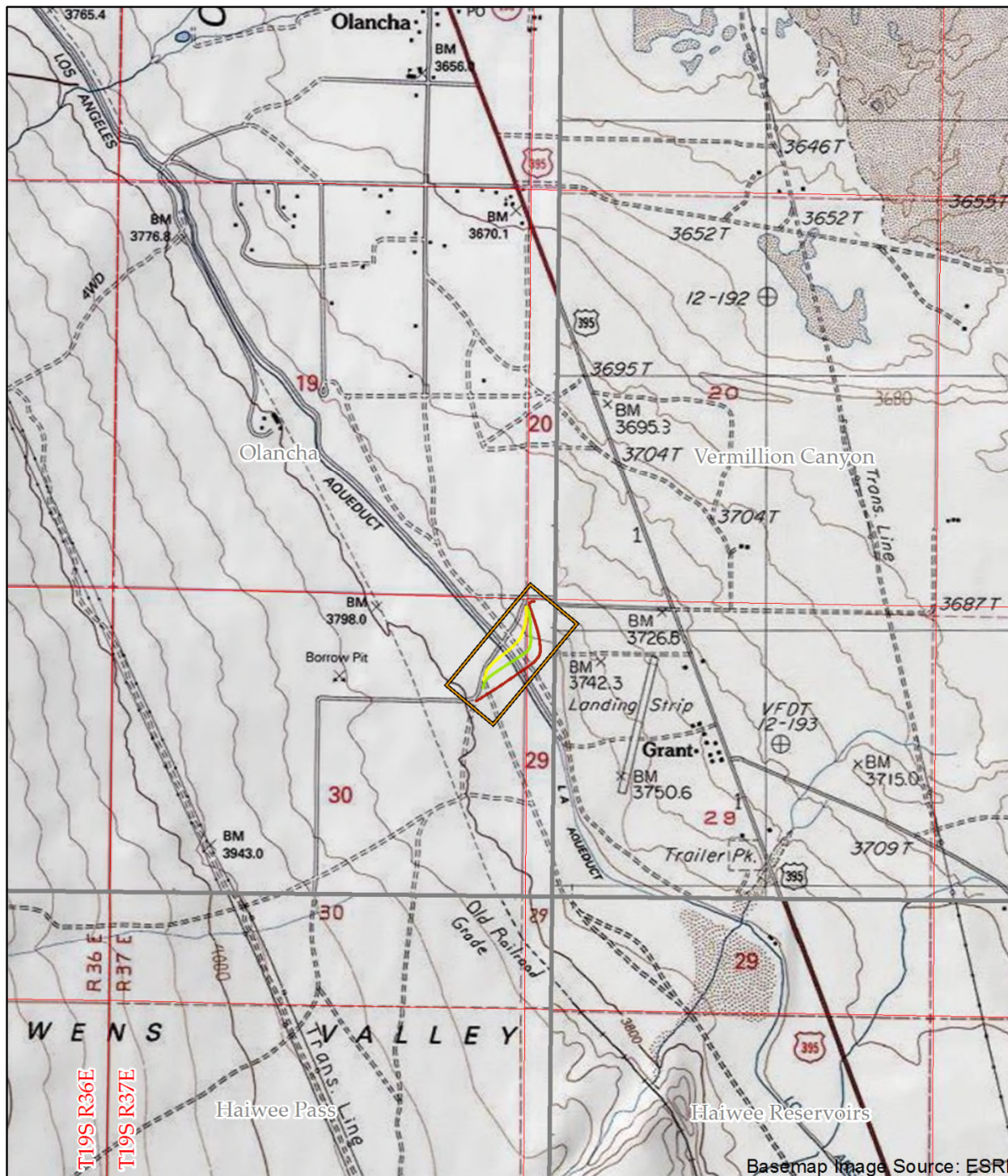


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05/04/2015



Walker Creek Bridge Replacement Project

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- Alternate 2
- Alternate 3
- Cultural Survey Area



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(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Mr. Raymond Andrews
Tribal Historic Preservation Officer
Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514

Dear Mr. Andrews,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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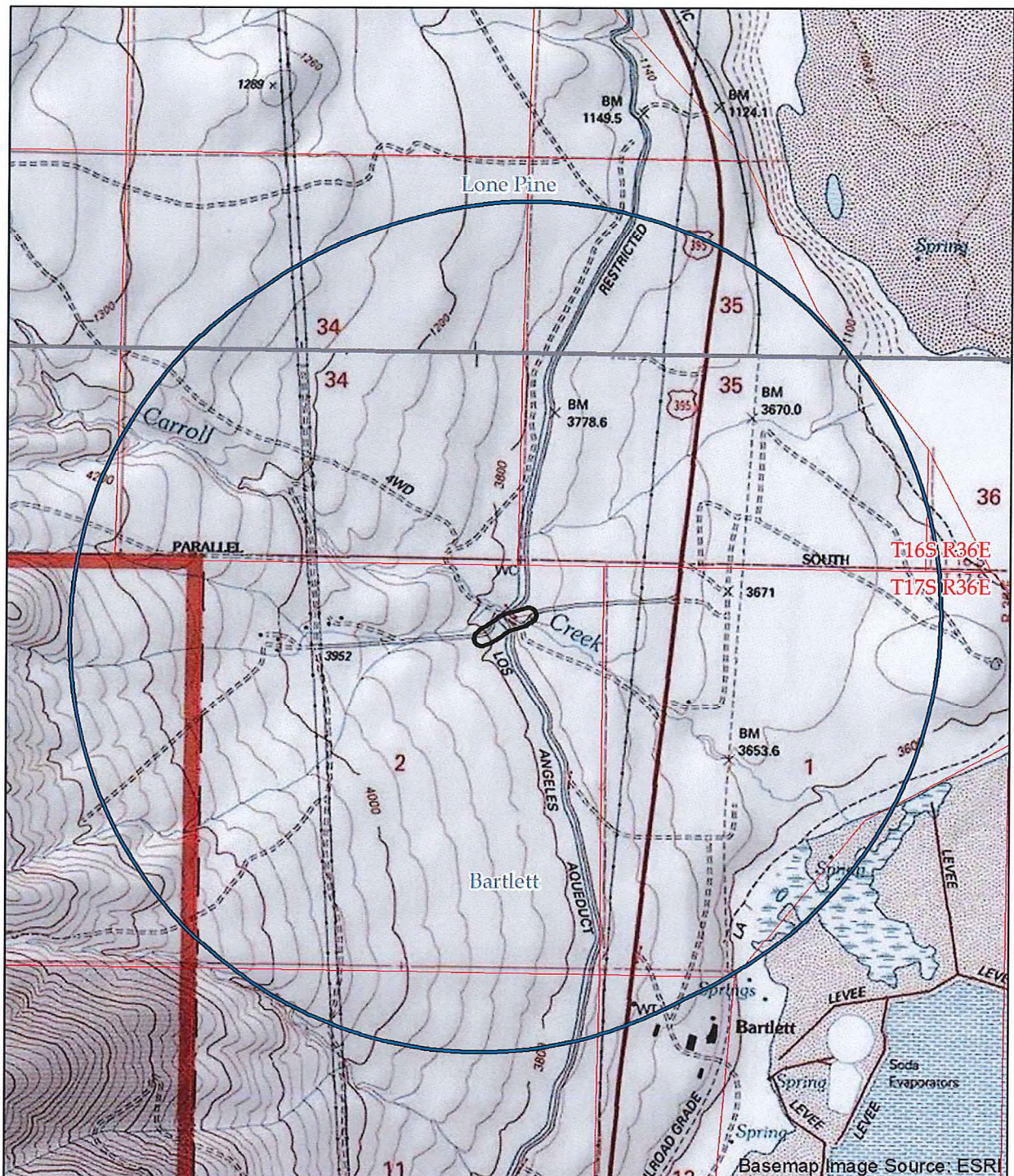
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Sincerely,

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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

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Kilometers

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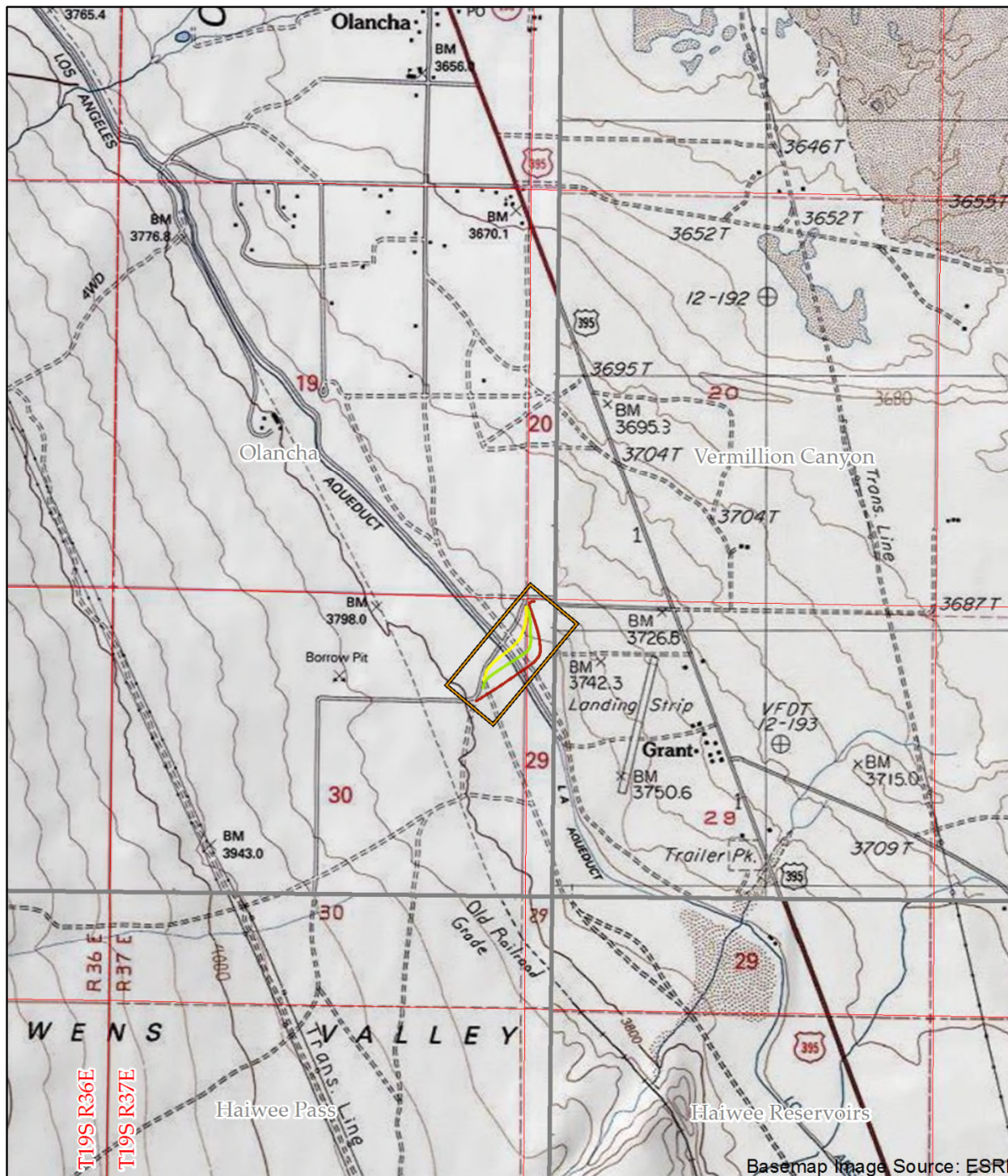


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UTM Zone 11N

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05/04/2015



Base map image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



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(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Mr. Gerald Howard
Chairperson
Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514

Dear Mr. Howard,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancho (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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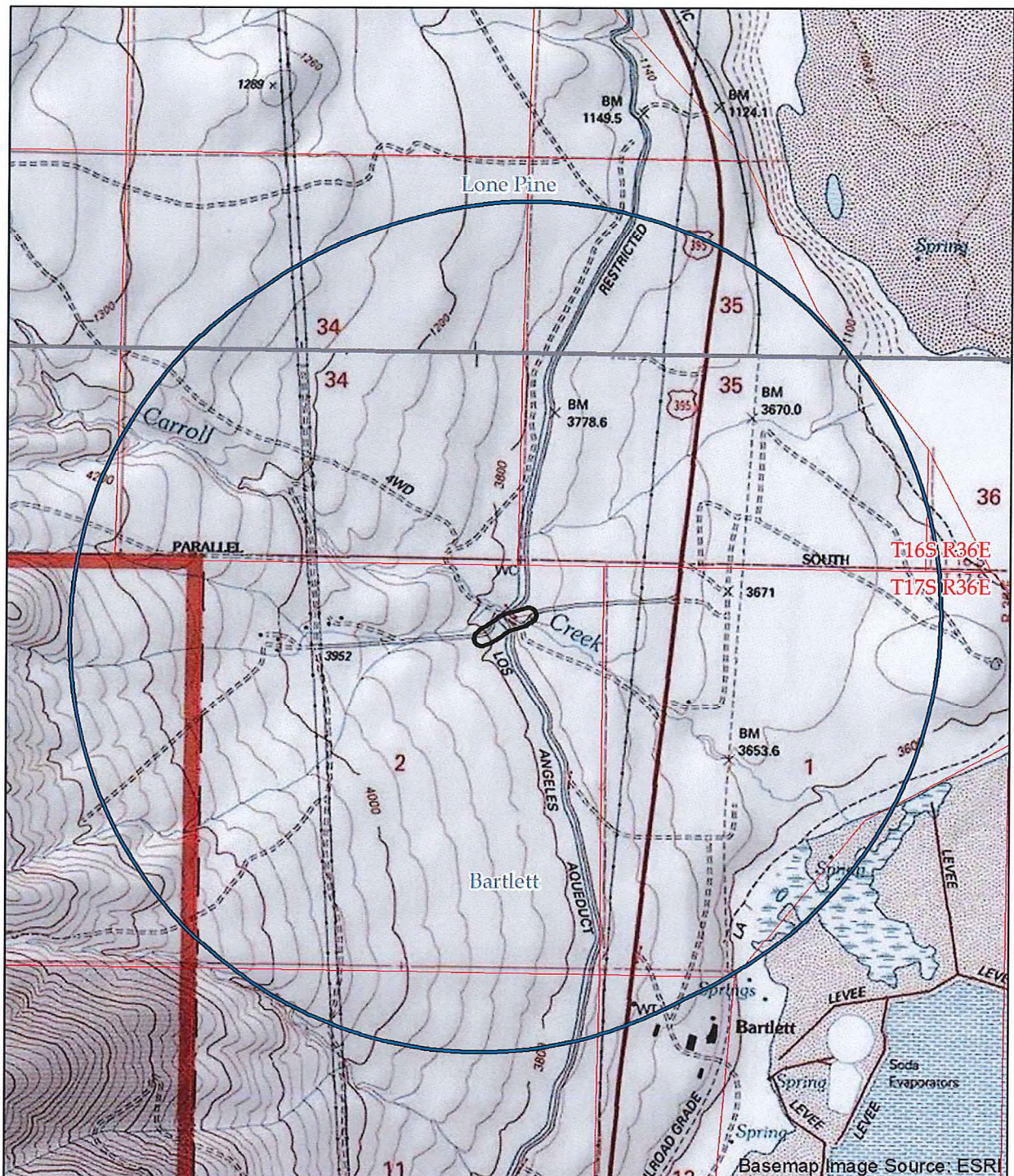
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Sincerely,

A handwritten signature in blue ink that reads "Chantel R. Brown".

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

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○ Quad Boundary

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Kilometers

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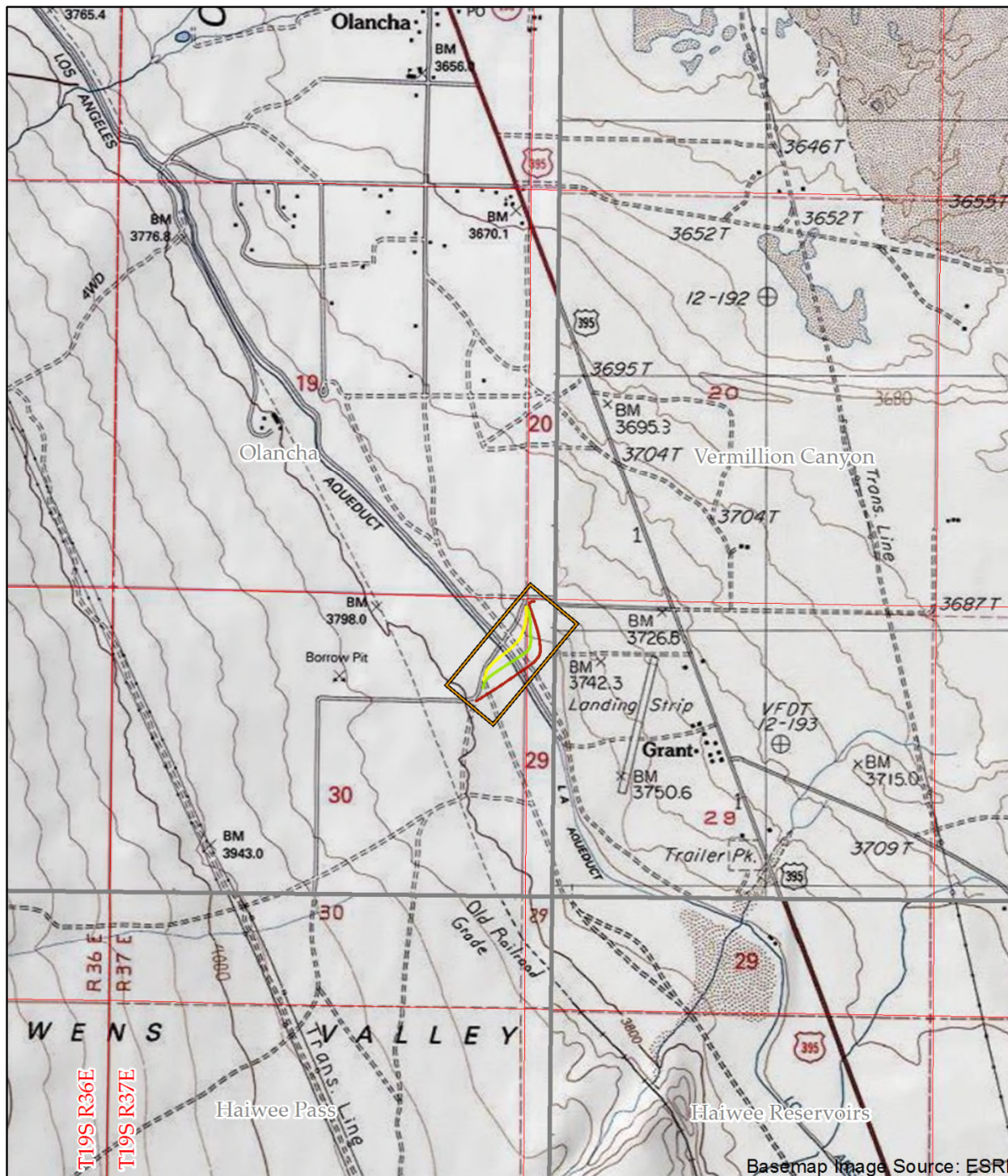


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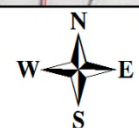
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Walker Creek Bridge Replacement Project

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DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Gertrude Brown
Secretary
Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514

Dear Ms. Brown,

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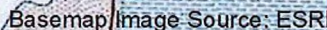
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Sincerely,

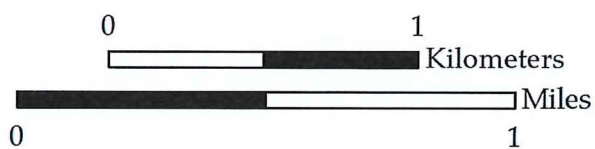
Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



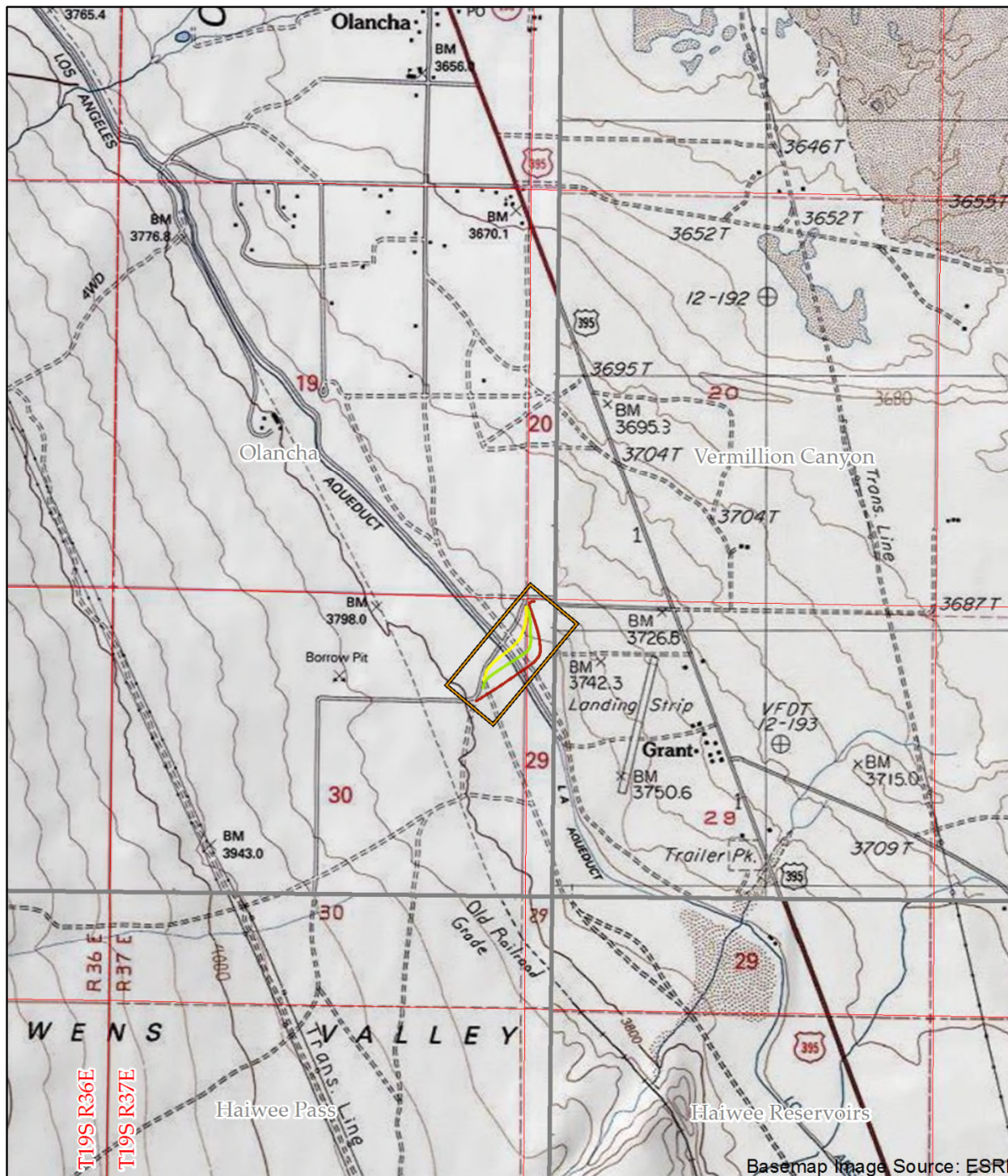
Carrol Creek Bridge Replacement - Records Search

-  APE
 Records Search Area
 Quad Boundary



1:24000
NAD 83
UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Stephanie Arman
Tribal Historic Preservation Officer
Fort Independence Paiute Tribe
P.O. Box 67
Independence, CA 93526

Dear Ms. Arman,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancho (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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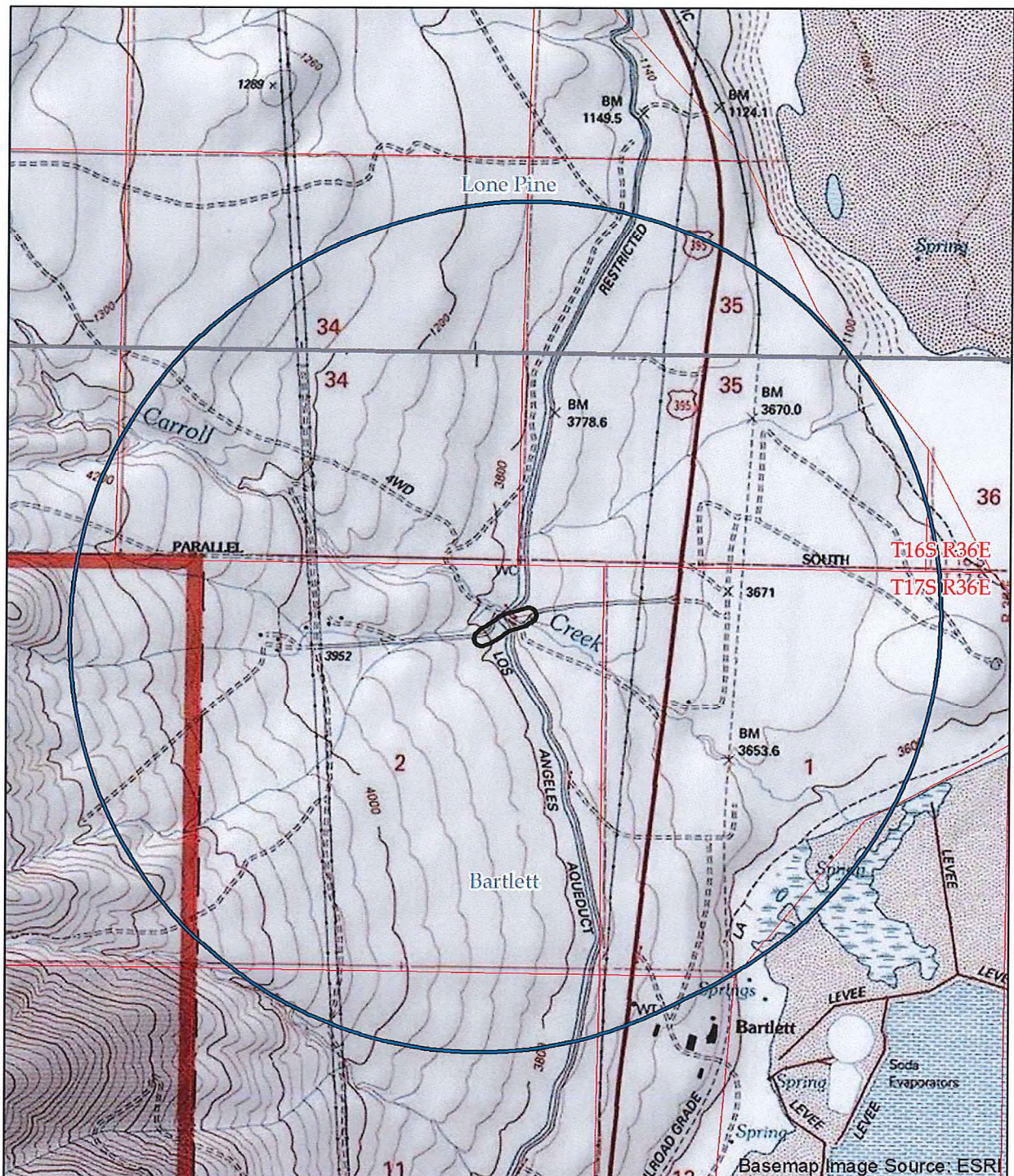
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Sincerely,

A handwritten signature in blue ink that reads "Chantel R. Brown".

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

0

1

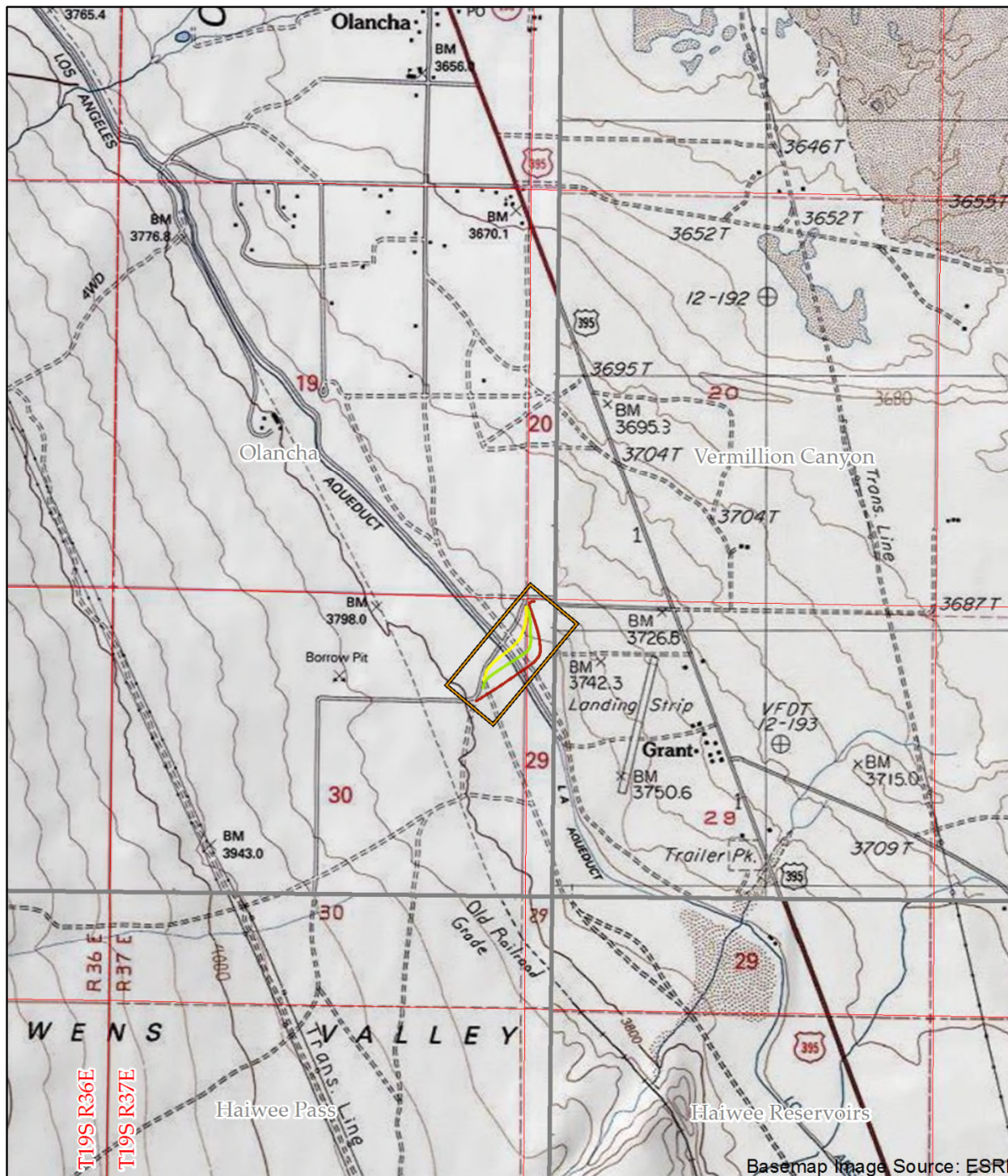


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NAD 83

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Walker Creek Bridge Replacement Project

- Alternate 1
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- Alternate 3
- Cultural Survey Area



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County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Wendy Stine
Chairperson
Fort Independence Paiute Tribe
P.O. Box 67
Independence, CA 93526

Dear Ms. Stine,

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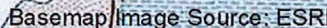
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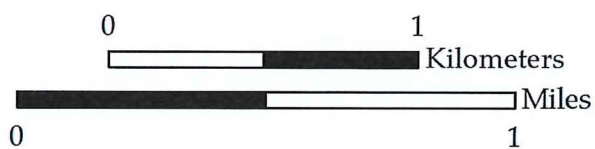
Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



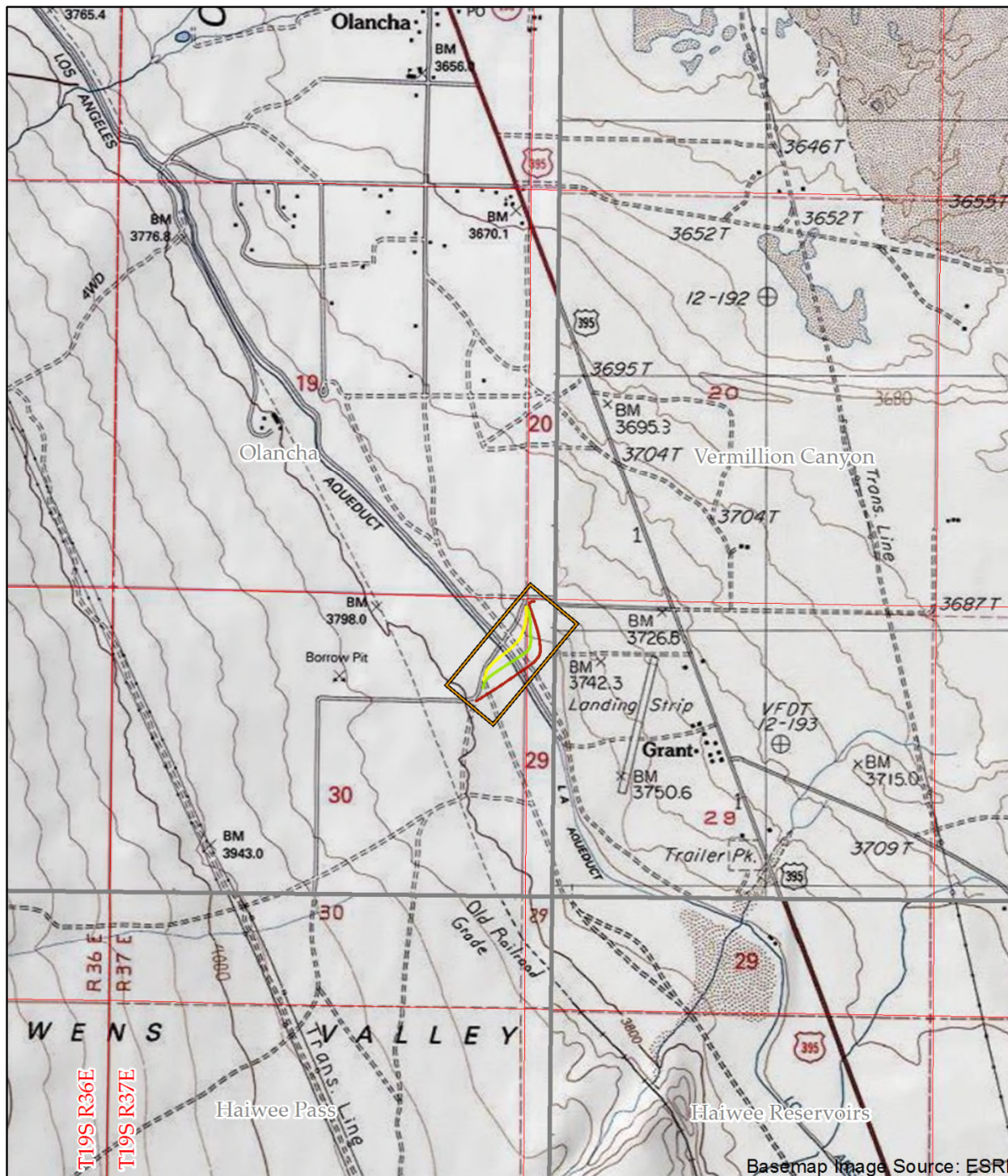
Carrol Creek Bridge Replacement - Records Search

-  APE
 Records Search Area
 Quad Boundary



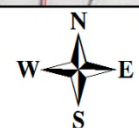
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UTM Zone 11N

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Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



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09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Lindsey Stine
Secretary
Fort Independence Paiute Tribe
P.O. Box 67
Independence, CA 93526

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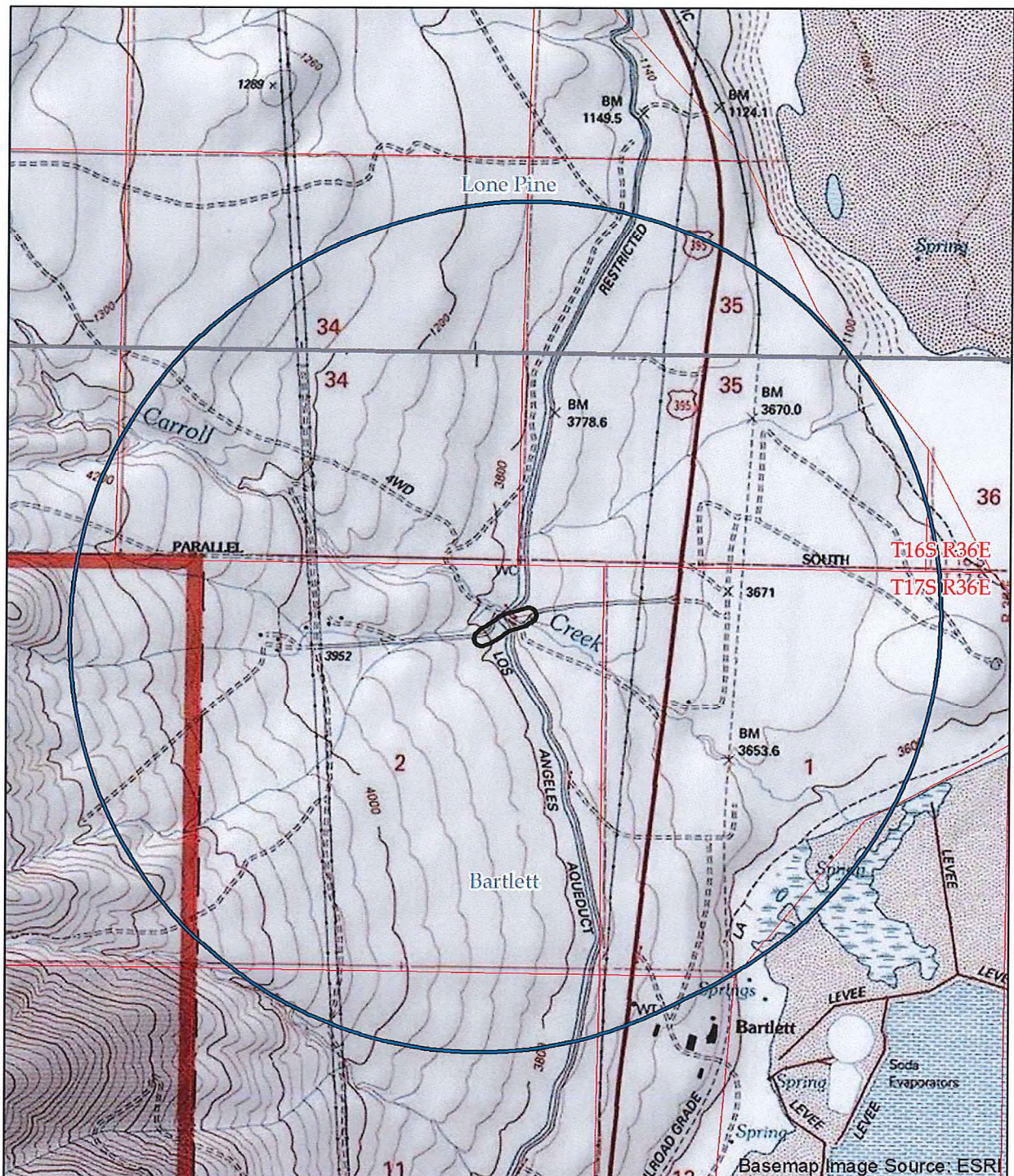
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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

0

1

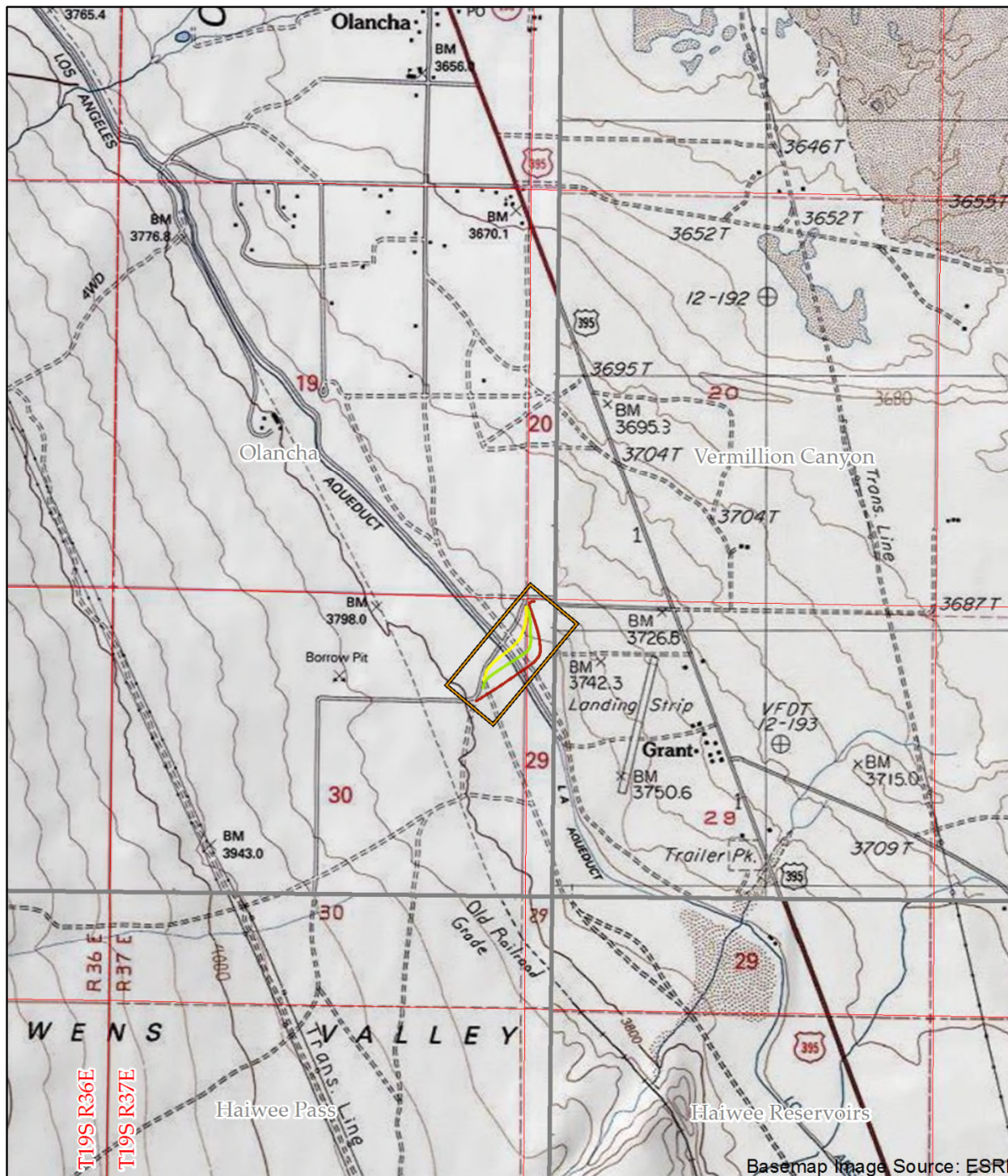


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NAD 83

UTM Zone 11N

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05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
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- Alternate 3
- Cultural Survey Area



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NAD 83
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09/21/2015



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(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Kathy Bancroft
Tribal Historic Preservation Officer
Lone Pine Paiute Shoshone Tribe
P.O. Box 747
Lone Pine, CA 93545

Dear Ms. Bancroft,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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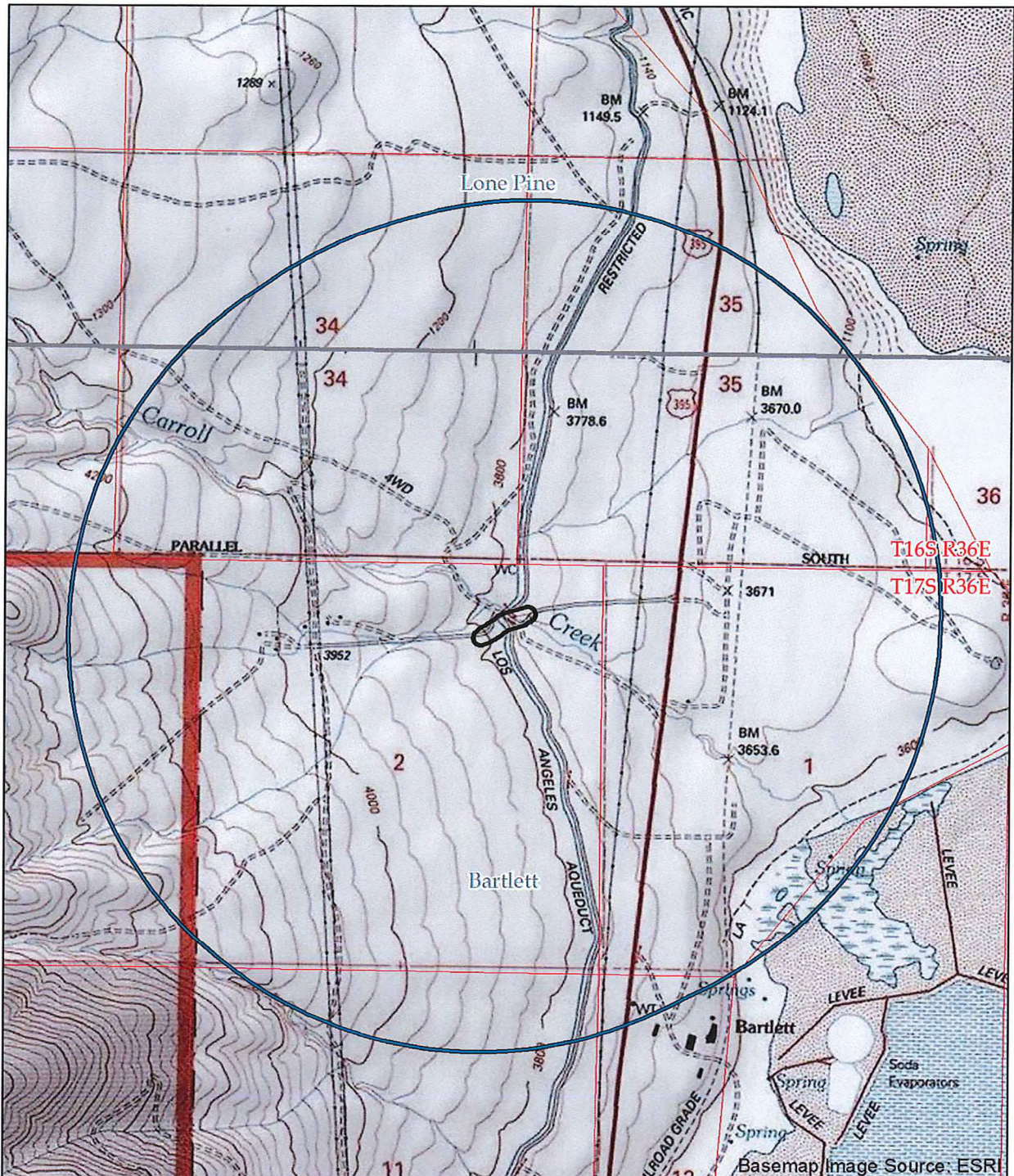
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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

0

1



1:24000

NAD 83

UTM Zone 11N

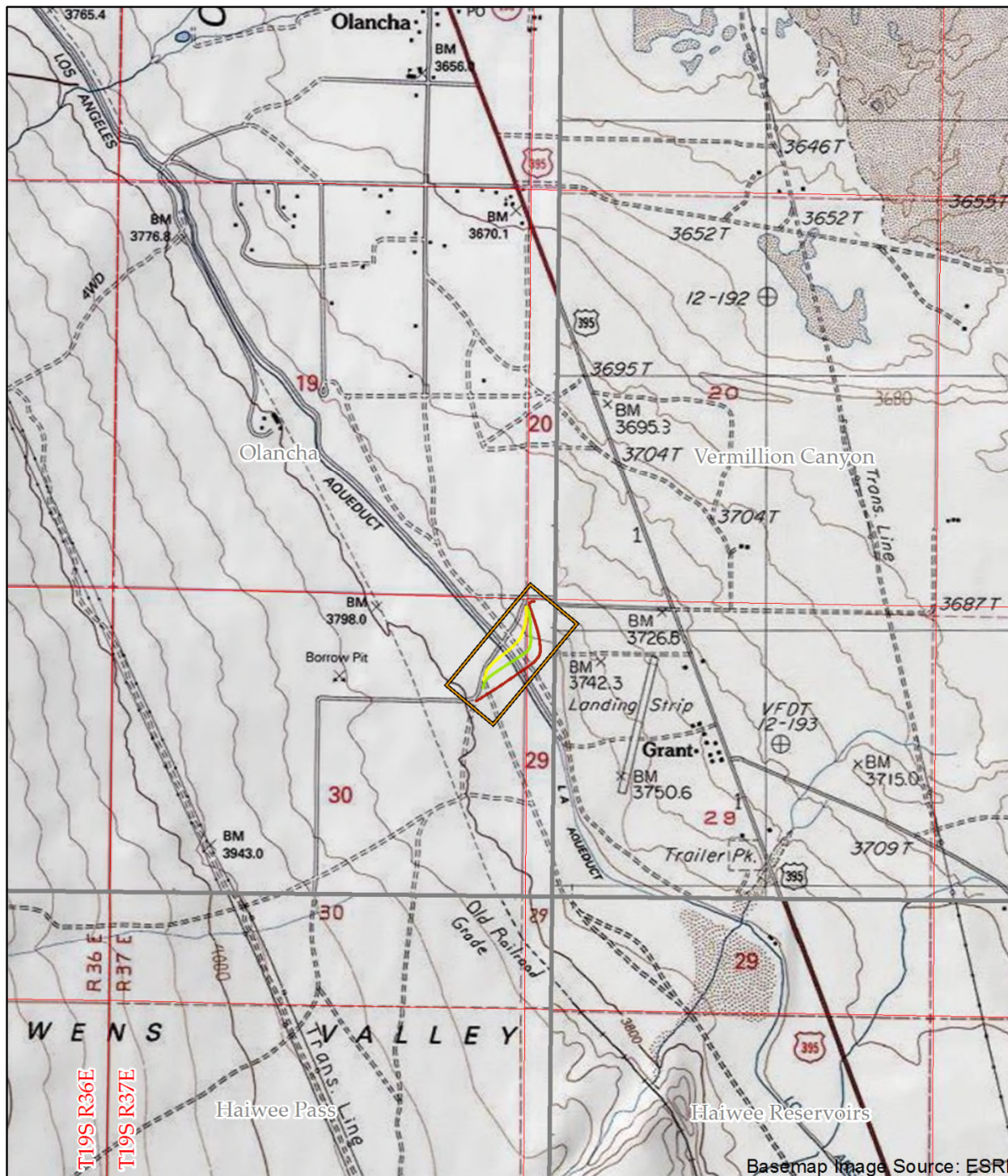
Map Produced by:

Montana M. Long

ASM Affiliates, Inc.

05/04/2015

Basemap Image Source: ESRI



Base map image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
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Montana M. Long
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09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Mary Wuester
Chairperson
Lone Pine Paiute Shoshone Tribe
P.O. Box 747
Lone Pine, CA 93545

Dear Ms. Wuester,

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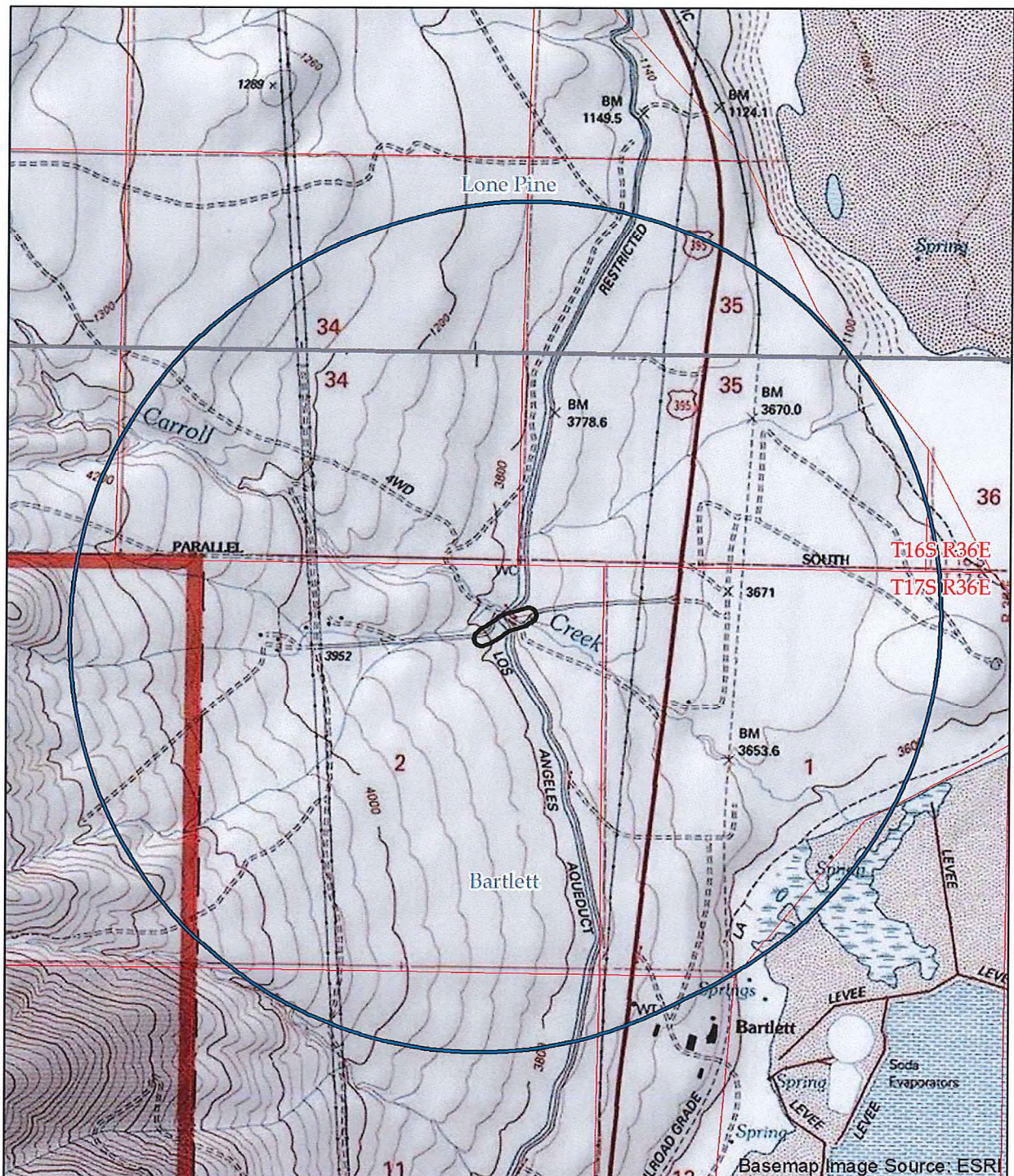
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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

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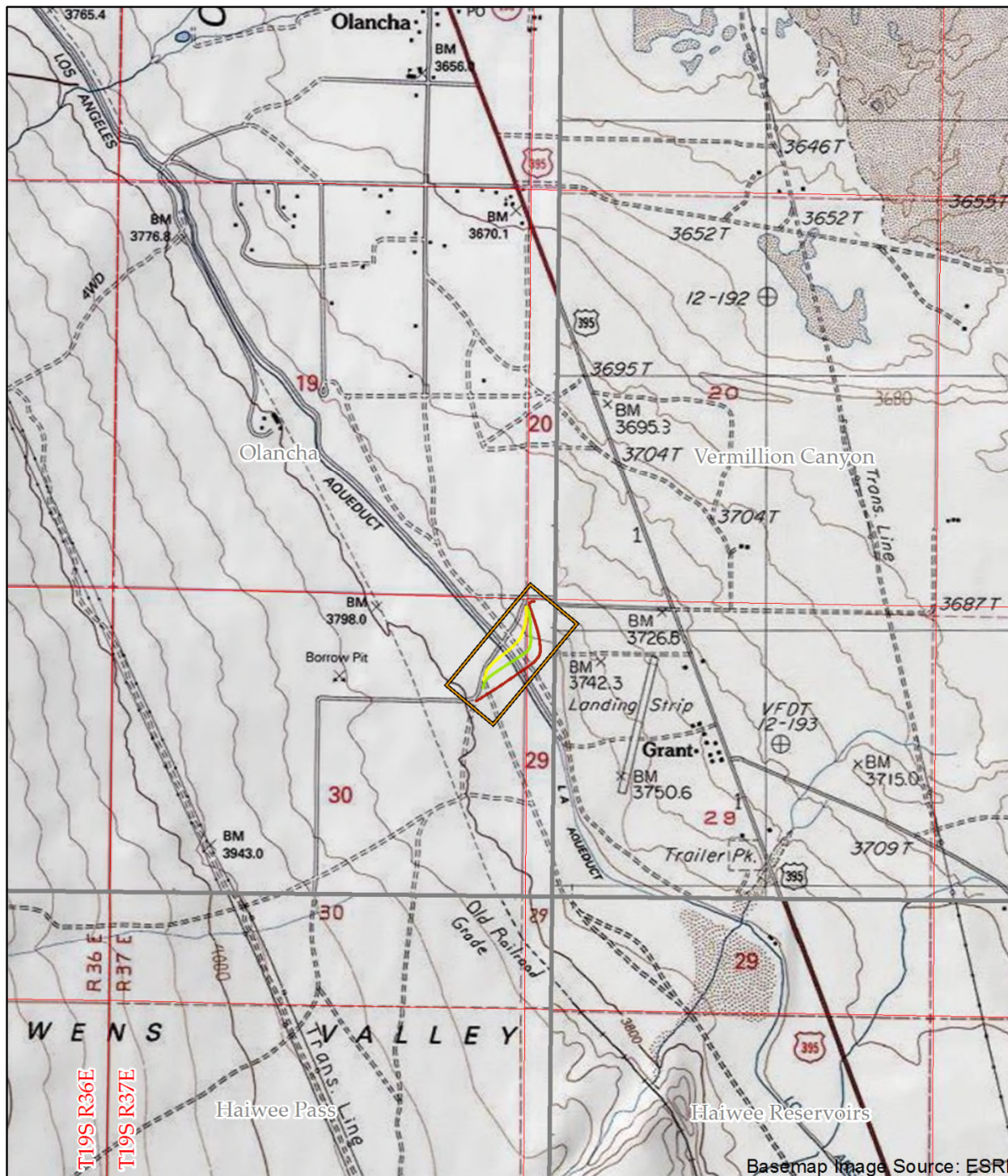


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NAD 83

UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Base map image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
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UTM Zone 11N
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ASM Affiliates, Inc.
09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Barbara Durham
Tribal Historic Preservation Officer
Timbisha Shoshone Tribe
PO Box 358
Death Valley, CA 92328

Dear Ms. Durham,

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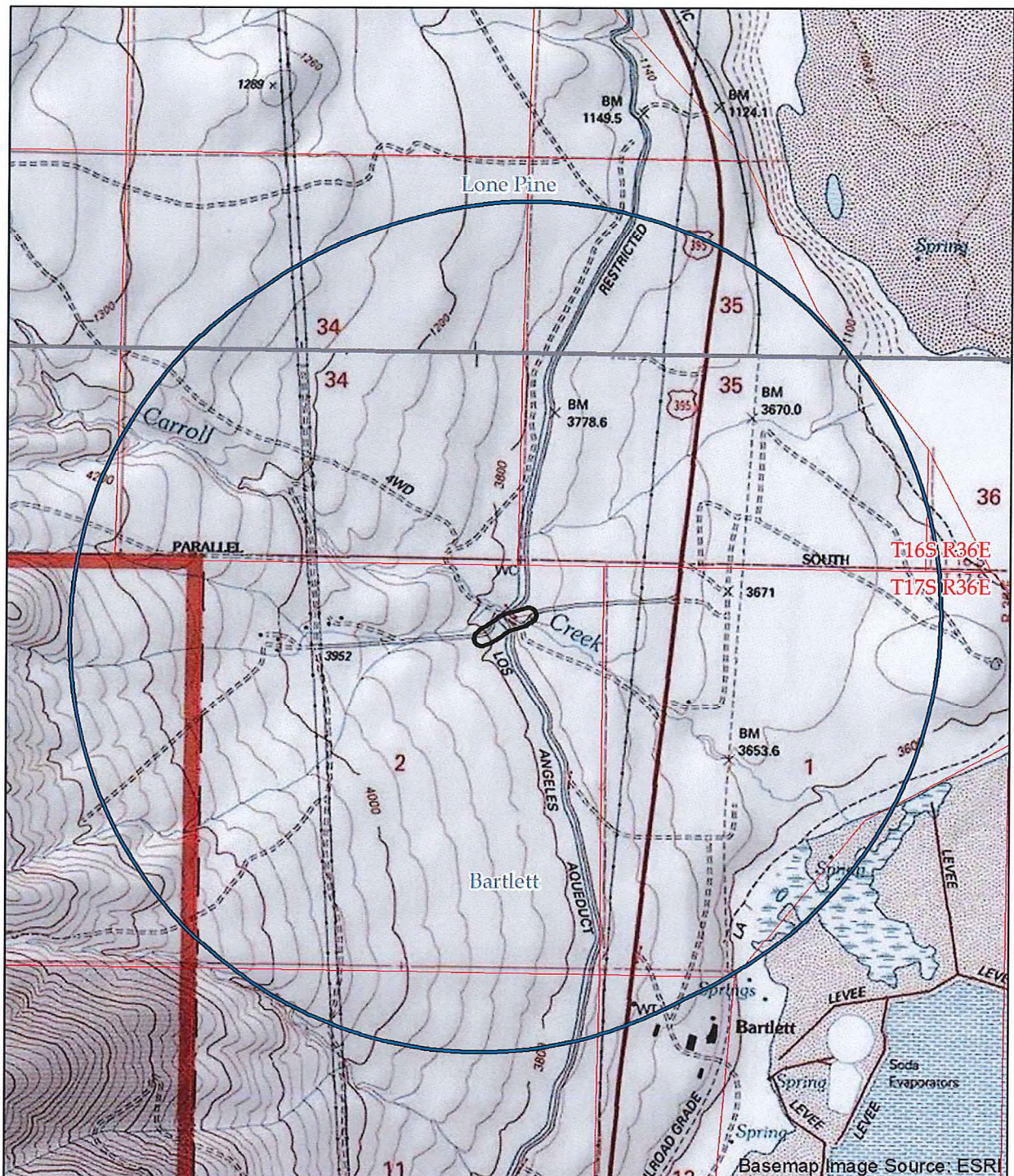
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Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

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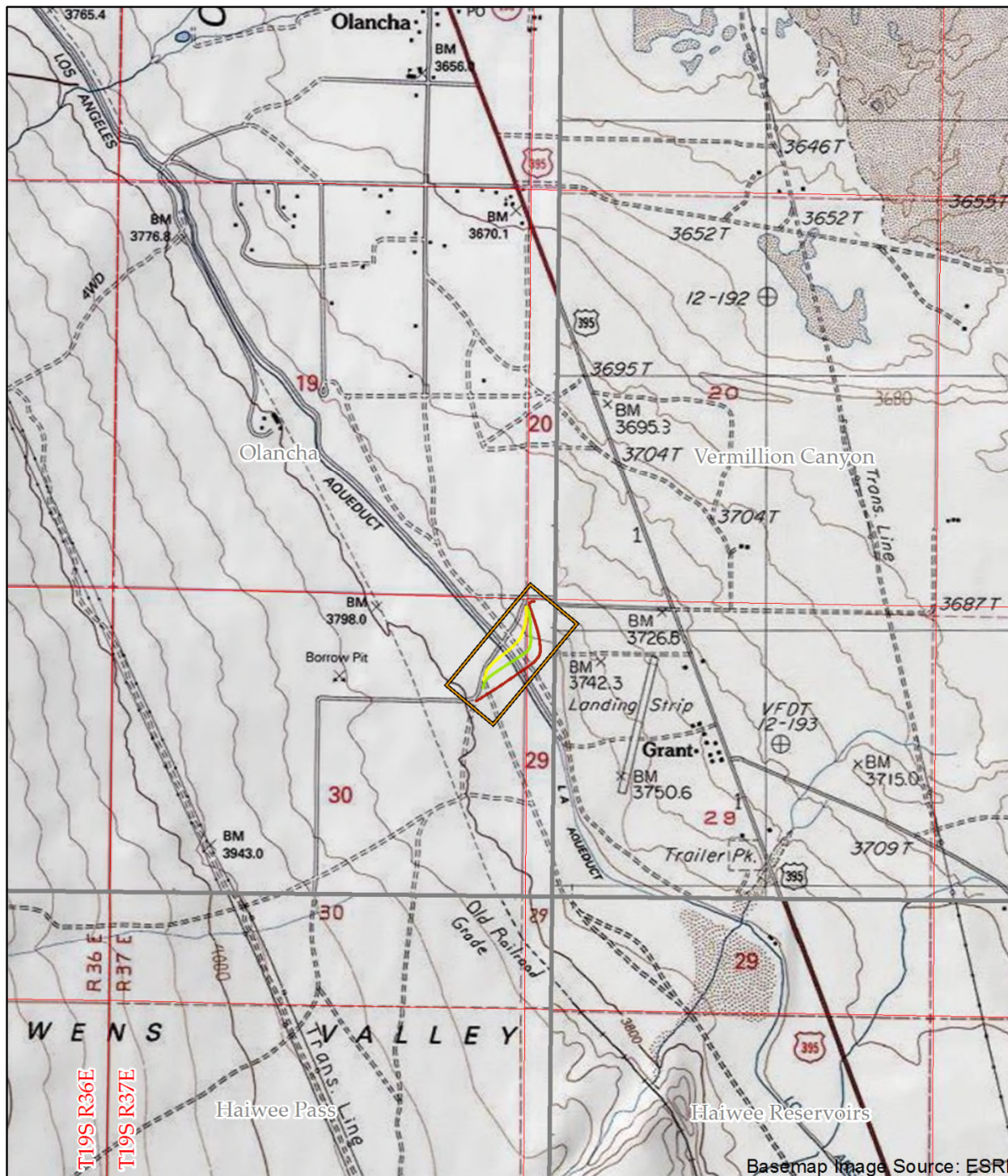


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05/04/2015



Walker Creek Bridge Replacement Project

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- Alternate 3
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INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Mr. George Gholson
Chairperson
Timbisha Shoshone Tribe
PO Box 1779
Bishop, CA 93515

Dear Mr. Gholson,

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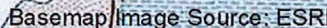
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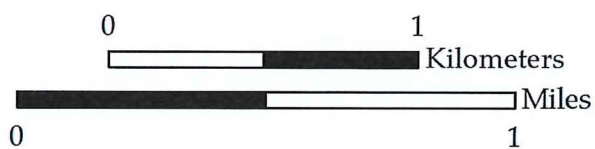
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Enclosure: Project Location Maps



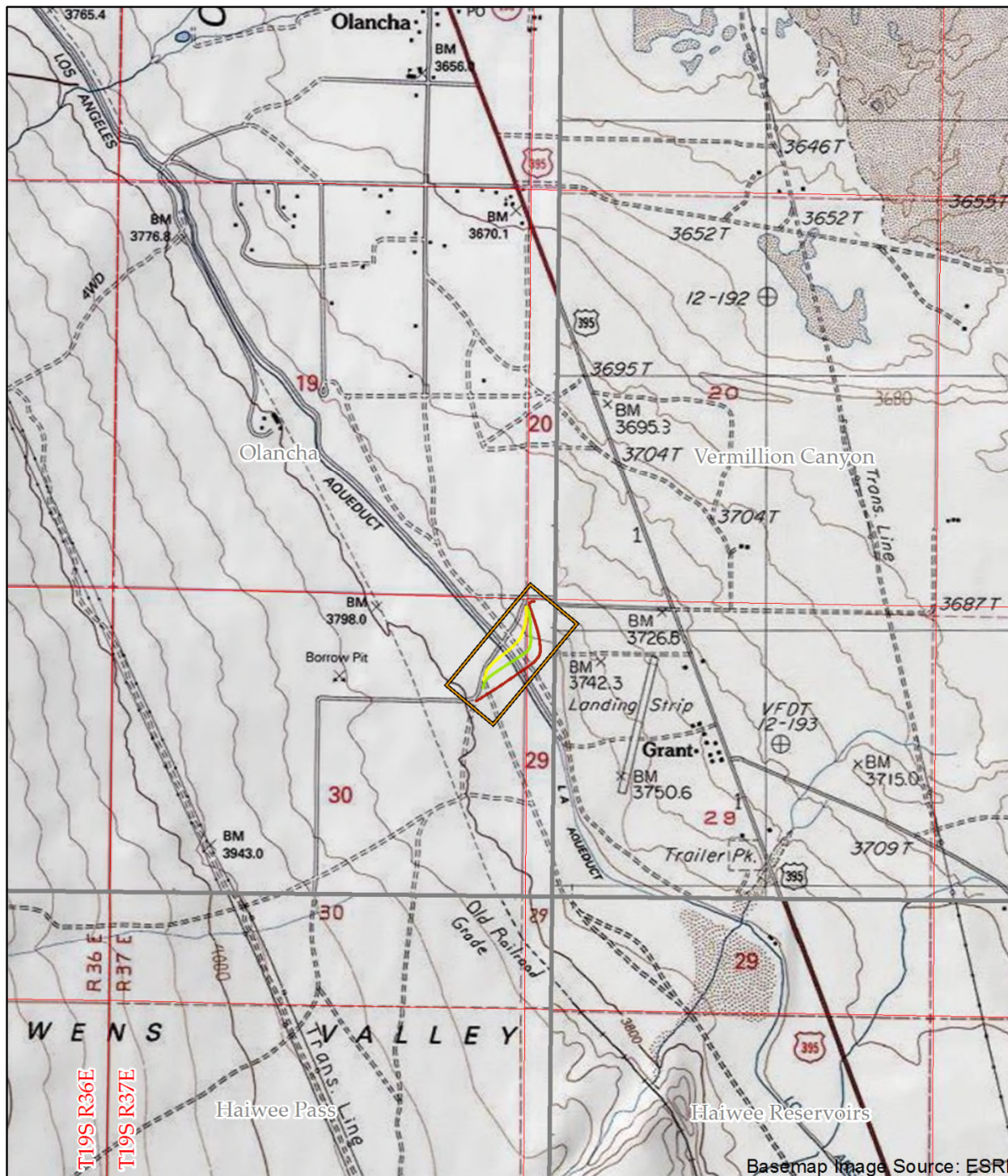
Carrol Creek Bridge Replacement - Records Search

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05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
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P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Ellie Jackson
Secretary
Timbisha Shoshone Tribe
PO Box 1779
Bishop, CA 93515

Dear Ms. Jackson,

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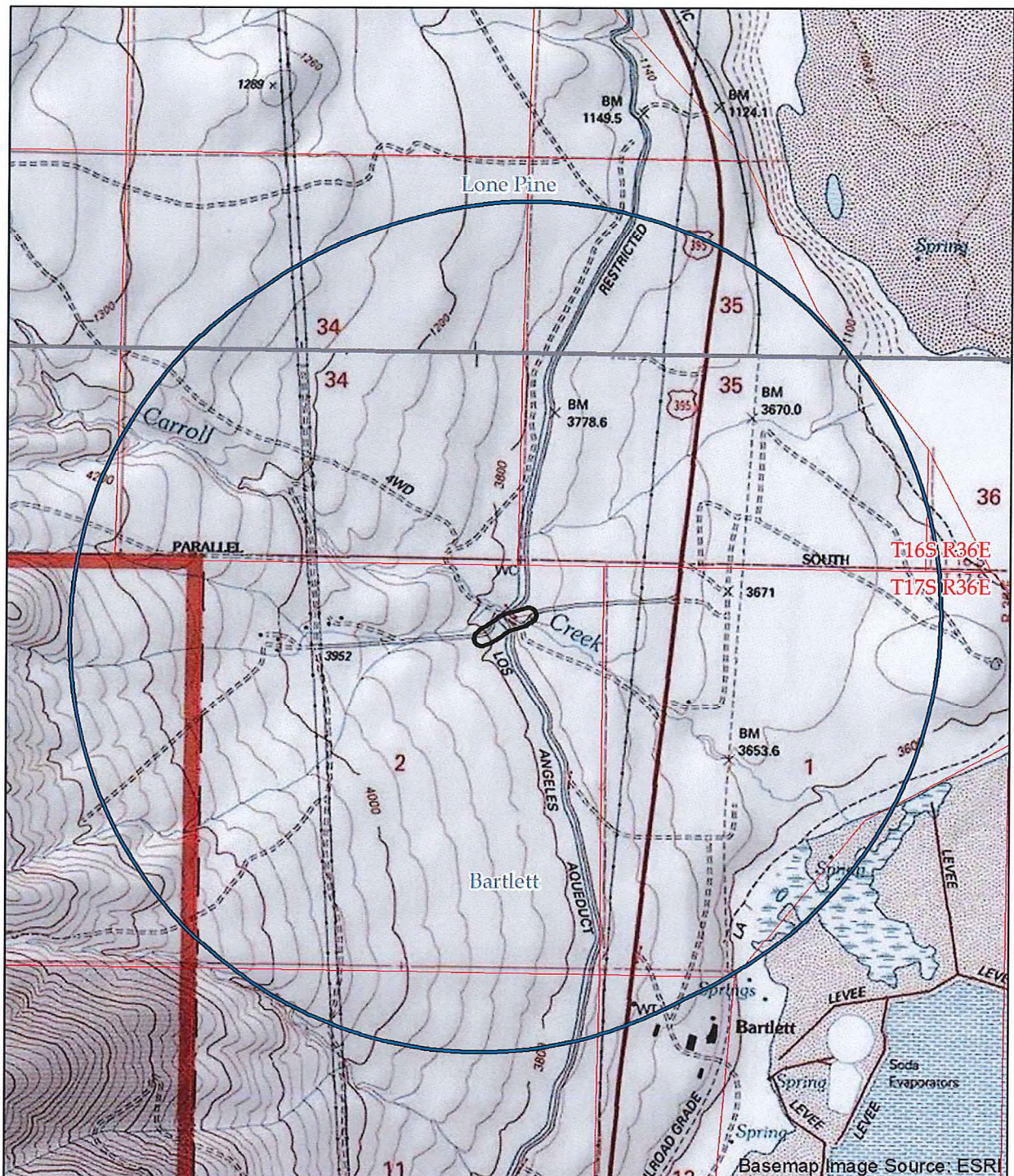
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Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

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○ Quad Boundary

0

1

Kilometers

Miles

0

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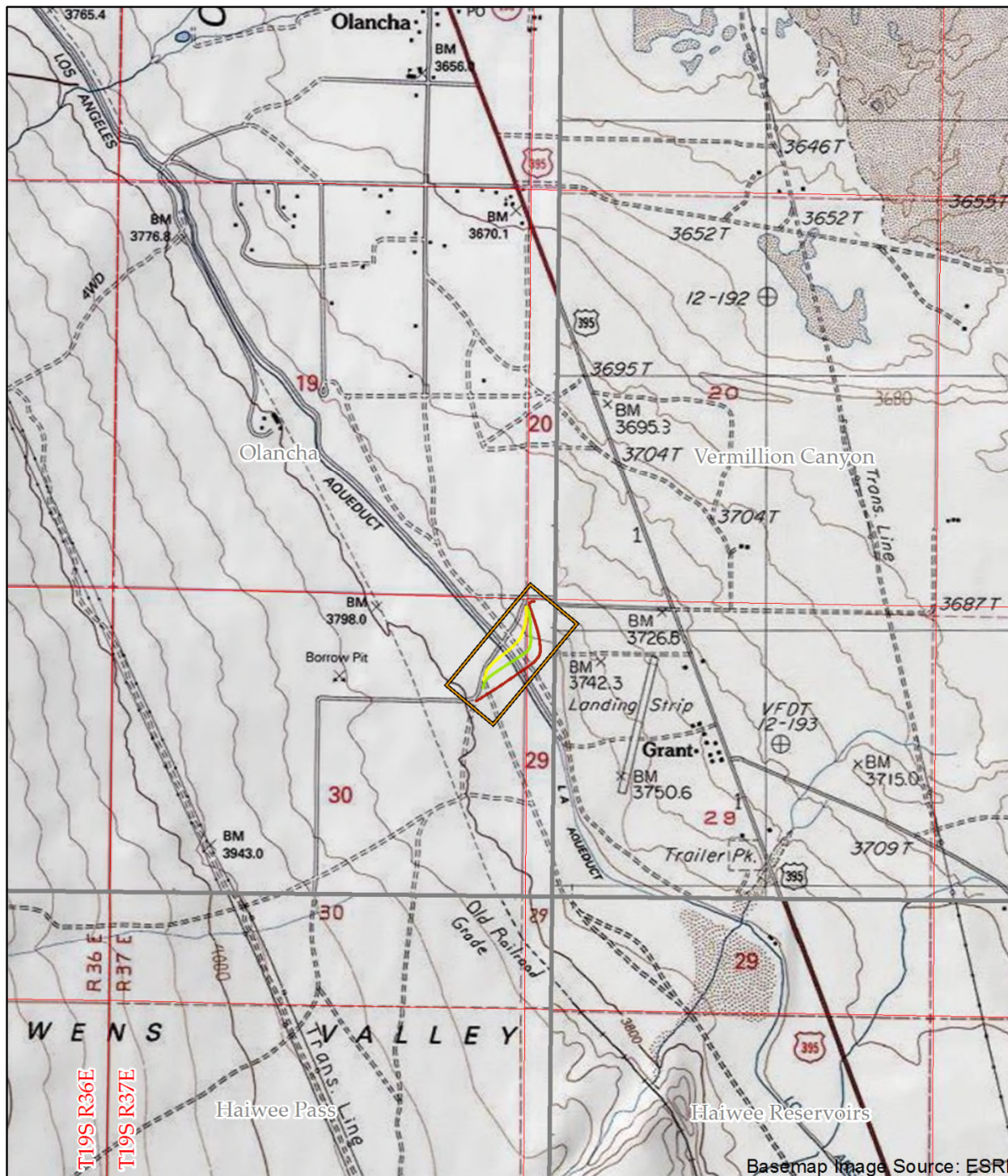


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NAD 83

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Map Produced by:
Montana M. Long
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05/04/2015



Basemap Image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
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INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Robert Robinson
Co-Chairperson
Kern Valley Indian Council
PO Box 401
Weldon, CA 93283

Dear Mr. Robinson,

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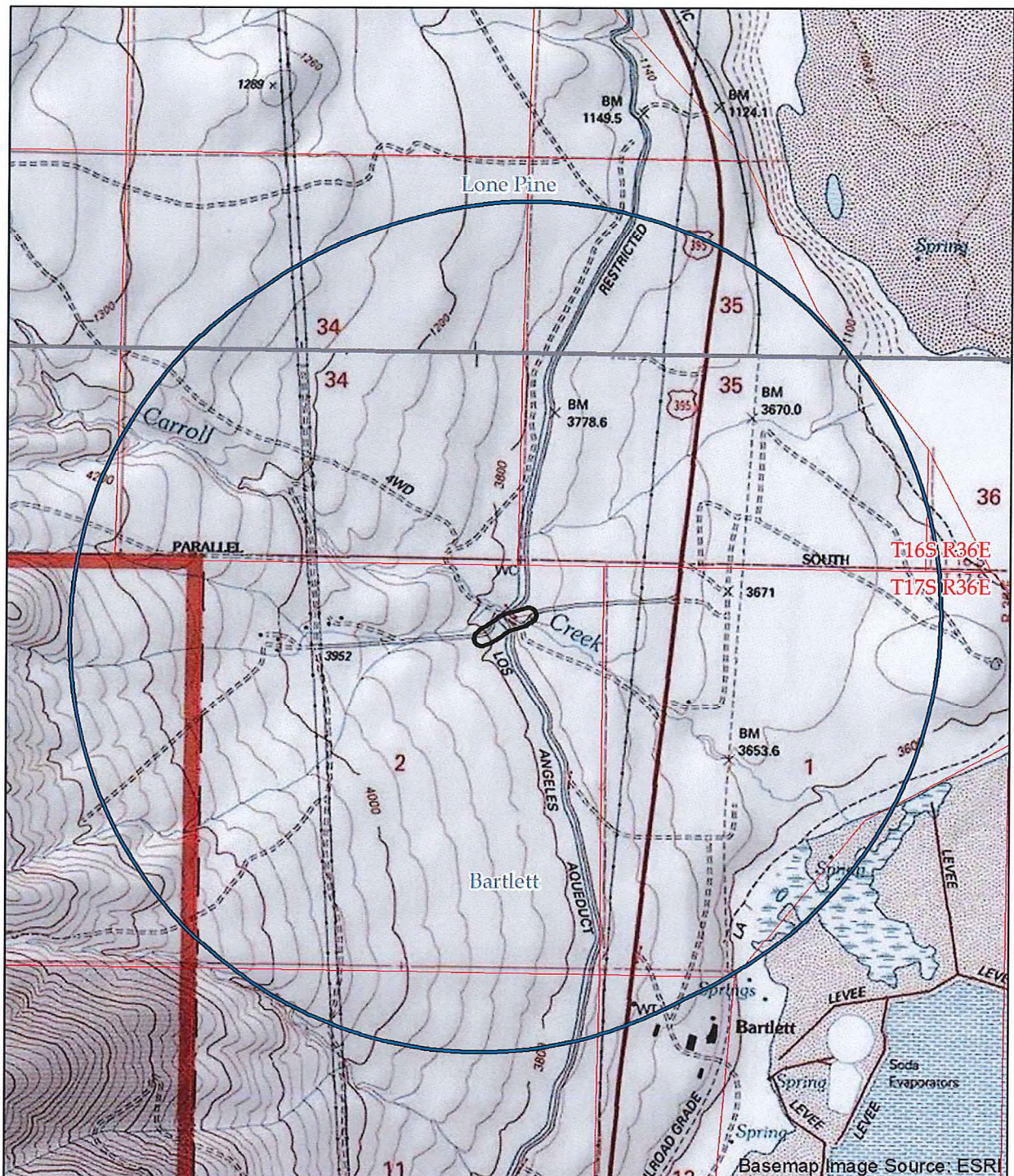
If you or any members of the Big Pine Paiute Tribe have any questions regarding this project, please contact the Project Manager, Kari Sprengeler at ASM Affiliates, by phone at 775-324-6789 or by email at ksprengeler@asmaffiliates.com, or Chantel Brown, Inyo County Public Works, at (760) 878-0201 or cbrown@inyocounty.us.

If you have any concerns or knowledge of cultural resources within the project area, please contact Caltrans District 9 Associate Archaeologist Trevor C. Pratt at (760) 872-3021 or by email at trevor.pratt@dot.ca.gov.

Sincerely,

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

0

1

Kilometers

0 1 Miles

0

1

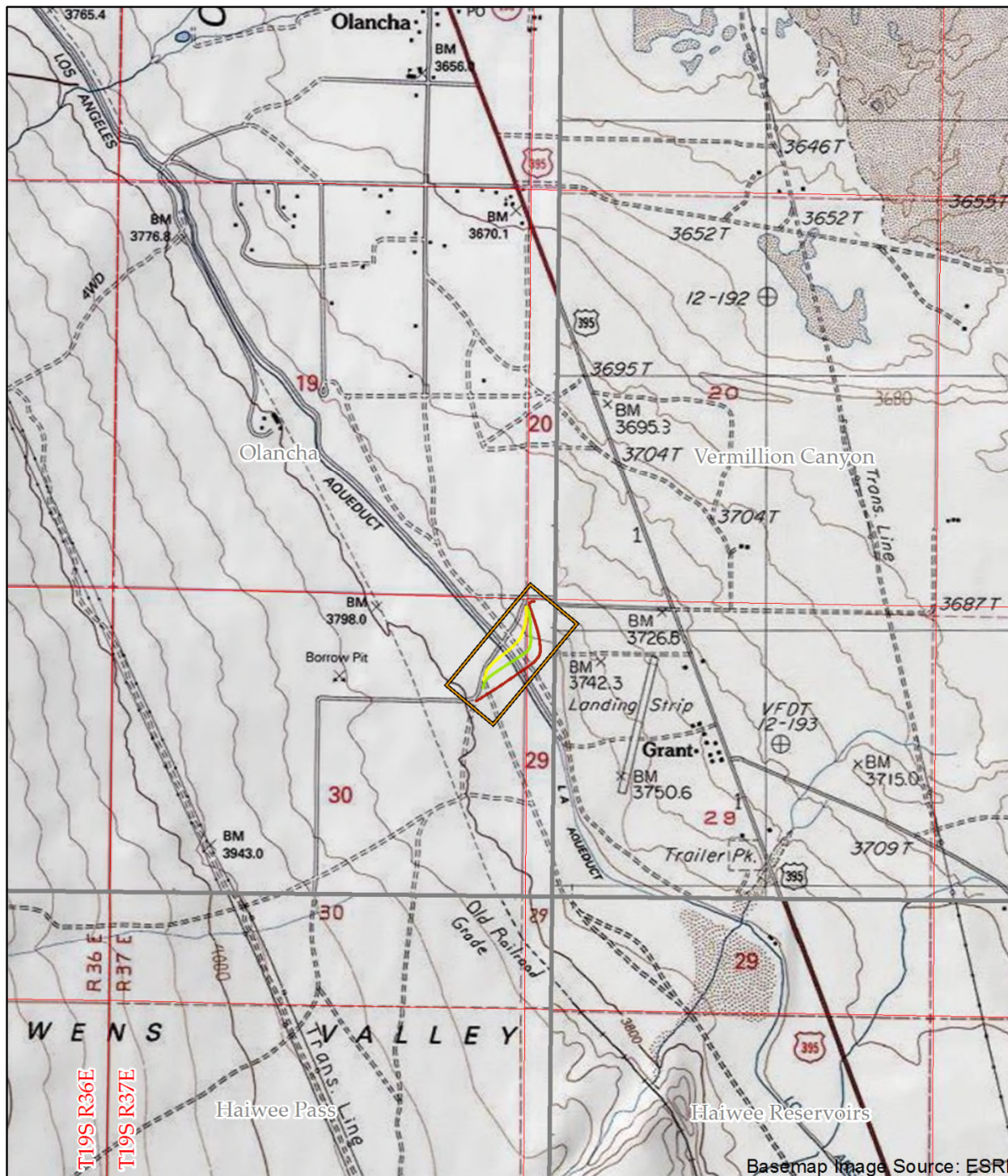


1:24000

NAD 83

UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Julie Turner
Secretary
Kern Valley Indian Council
PO Box 1010
Lake Isabella, CA 93240

Dear Ms. Turner,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

Inyo County has contracted Panorama Environmental (Panorama) and ASM Affiliates, Inc. (ASM) to conduct cultural resource studies. The study area will include all of the areas anticipated to be impacted by bridge replacement and road realignment.

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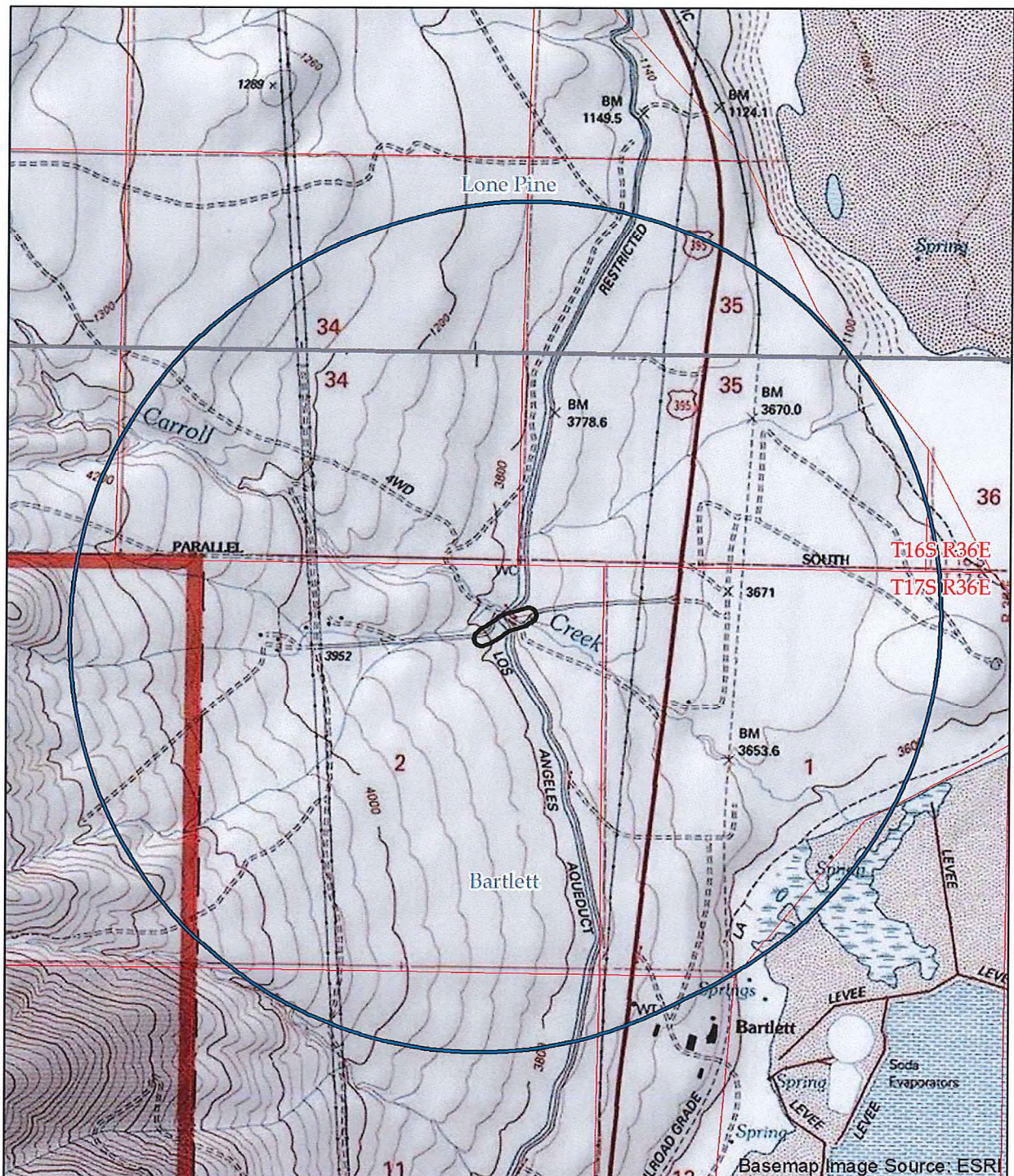
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Sincerely,

A handwritten signature in blue ink that reads "Chantel R. Brown".

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Carroll Creek Bridge Replacement - Records Search

○ APE

○ Records Search Area

○ Quad Boundary

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Kilometers

0 1 Miles

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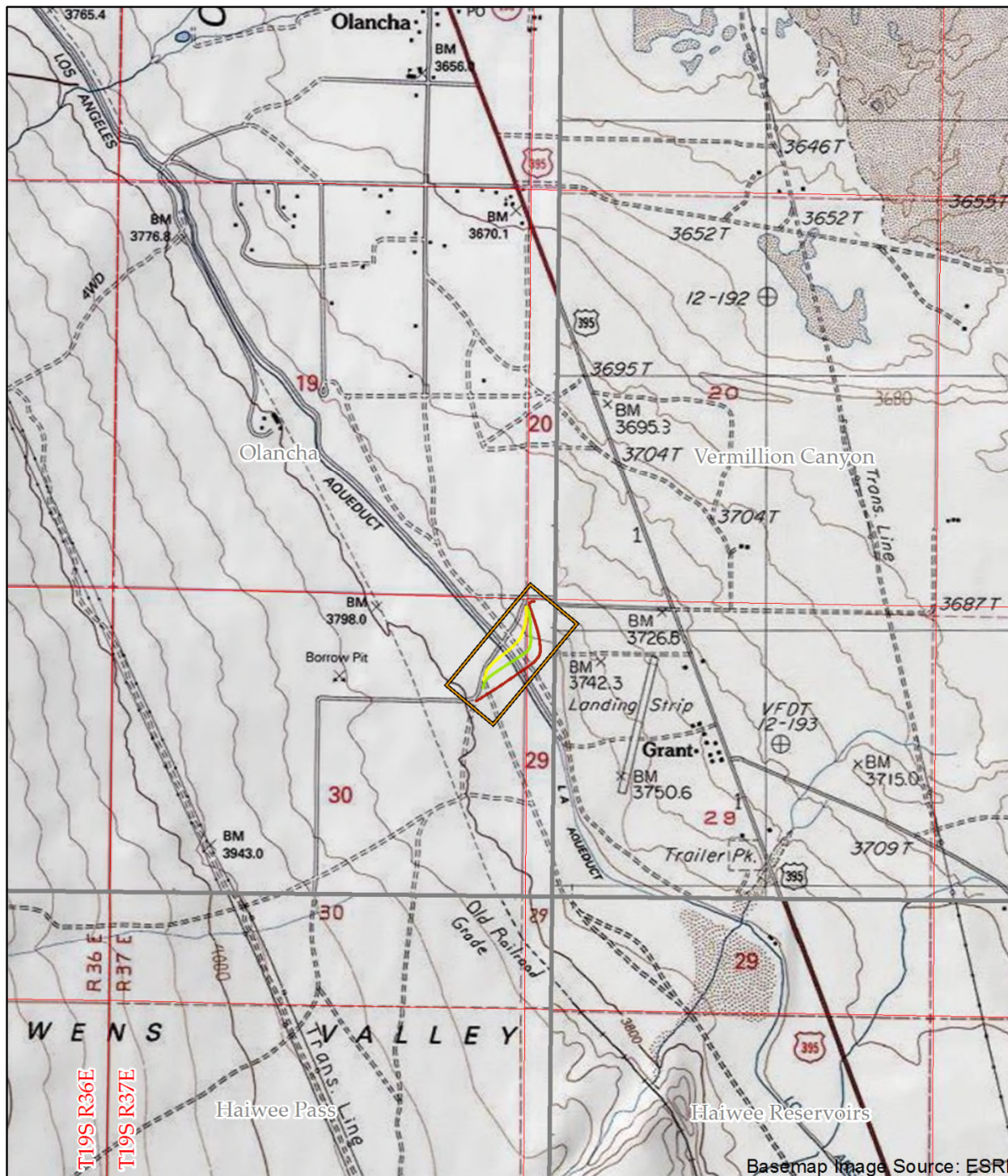


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NAD 83

UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Base map image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Melanie McFalls
Chairperson
Walker River Reservation
PO Box 220
Schurz, CA 89427

Dear Ms. McFalls,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancho (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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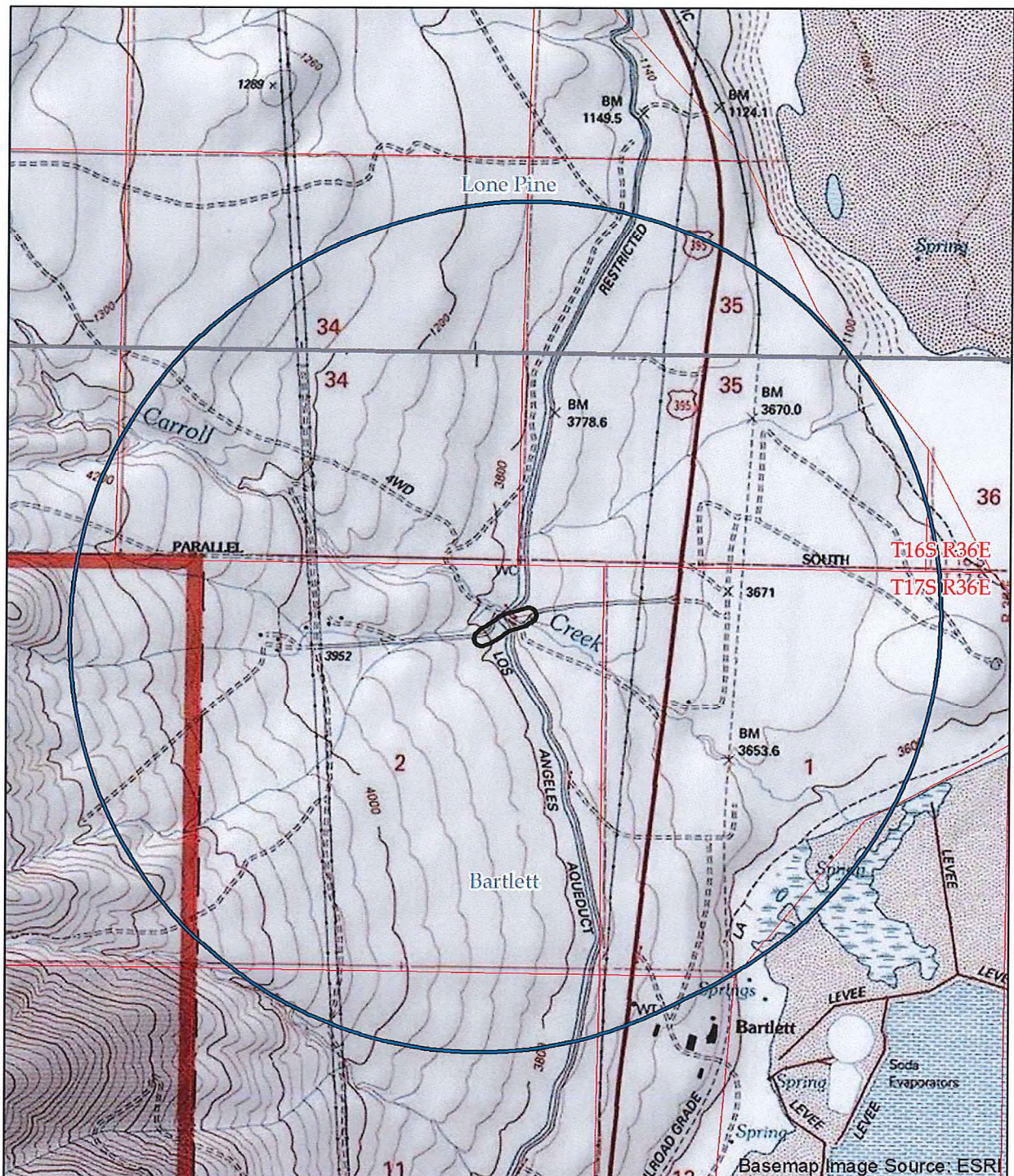
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Sincerely,

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



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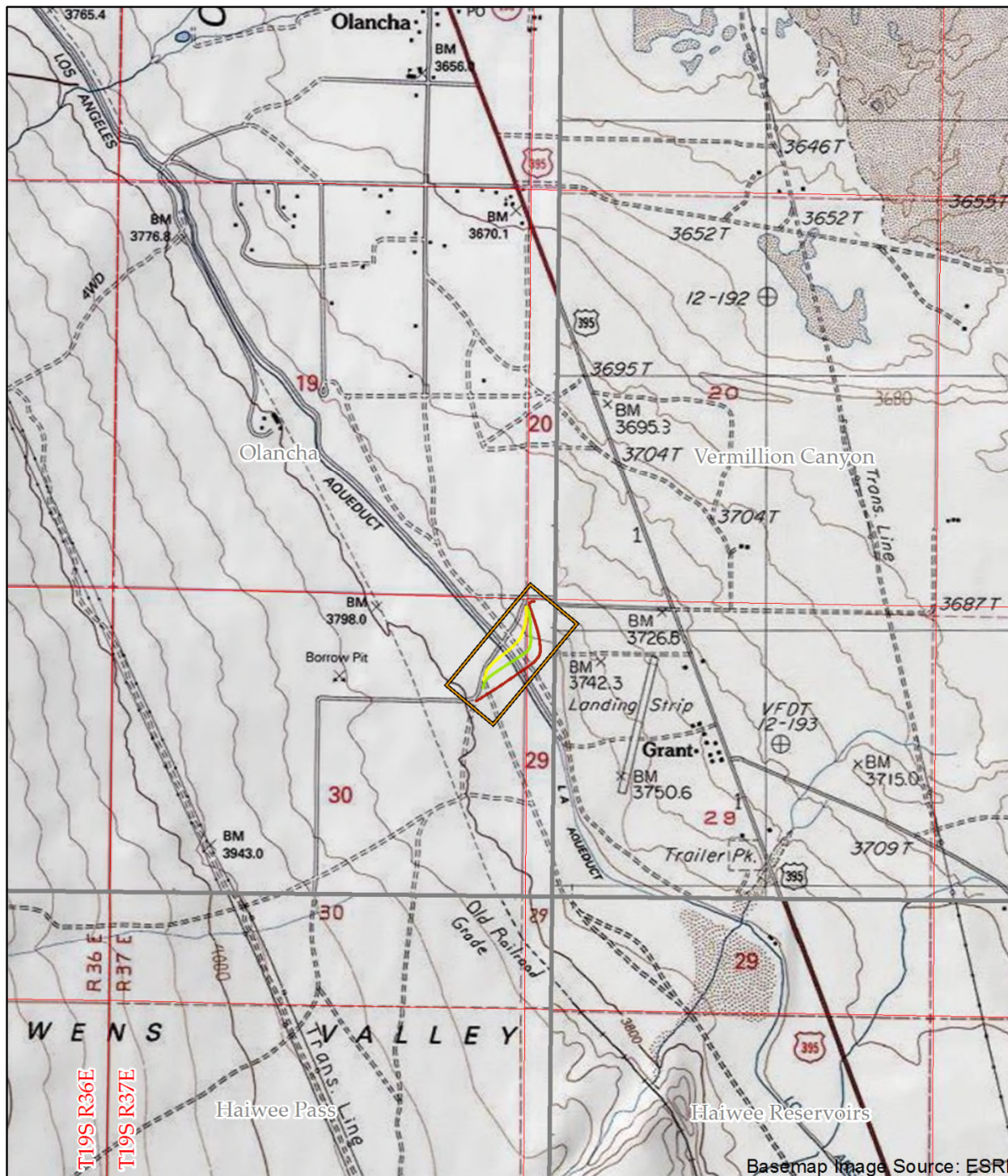


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NAD 83

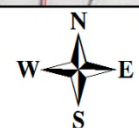
UTM Zone 11N

Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
05/04/2015



Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
Map Produced by:
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ASM Affiliates, Inc.
09/21/2015



DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER Q
INDEPENDENCE, CALIFORNIA 93526
(760) 878-0201
(760) 878-2001 FAX

County of

INYO

Clint Quilter - Director

October 1, 2015

Ms. Pricilla Naylor
Fort Independence Paiute Tribe
172 West Miller Lane
Independence, CA 93526

Dear Ms. Naylor,

The County of Inyo Department of Public Works (Inyo County), in conjunction with the California Department of Transportation (Caltrans), is proposing to replace the Walker Creek Road Bridge (County Bridge 48C-0039) with a new bridge and decommission the old bridge. The bridge is located west of U.S. 395, southwest of the town of Olancha (see Map 1, attached). The bridge replacement would also require a realignment of Walker Creek Road as it approaches the new bridge in either direction. Inyo County is considering three alternative options for the road location (see Map 2, attached). The need for the proposed project is to address structural and safety issues. This project would replace the old bridge with a new one that is structurally sound, meets modern structural and safety codes, and provides adequate vehicle access between U.S. 395 and residences and other destinations west of the bridge.

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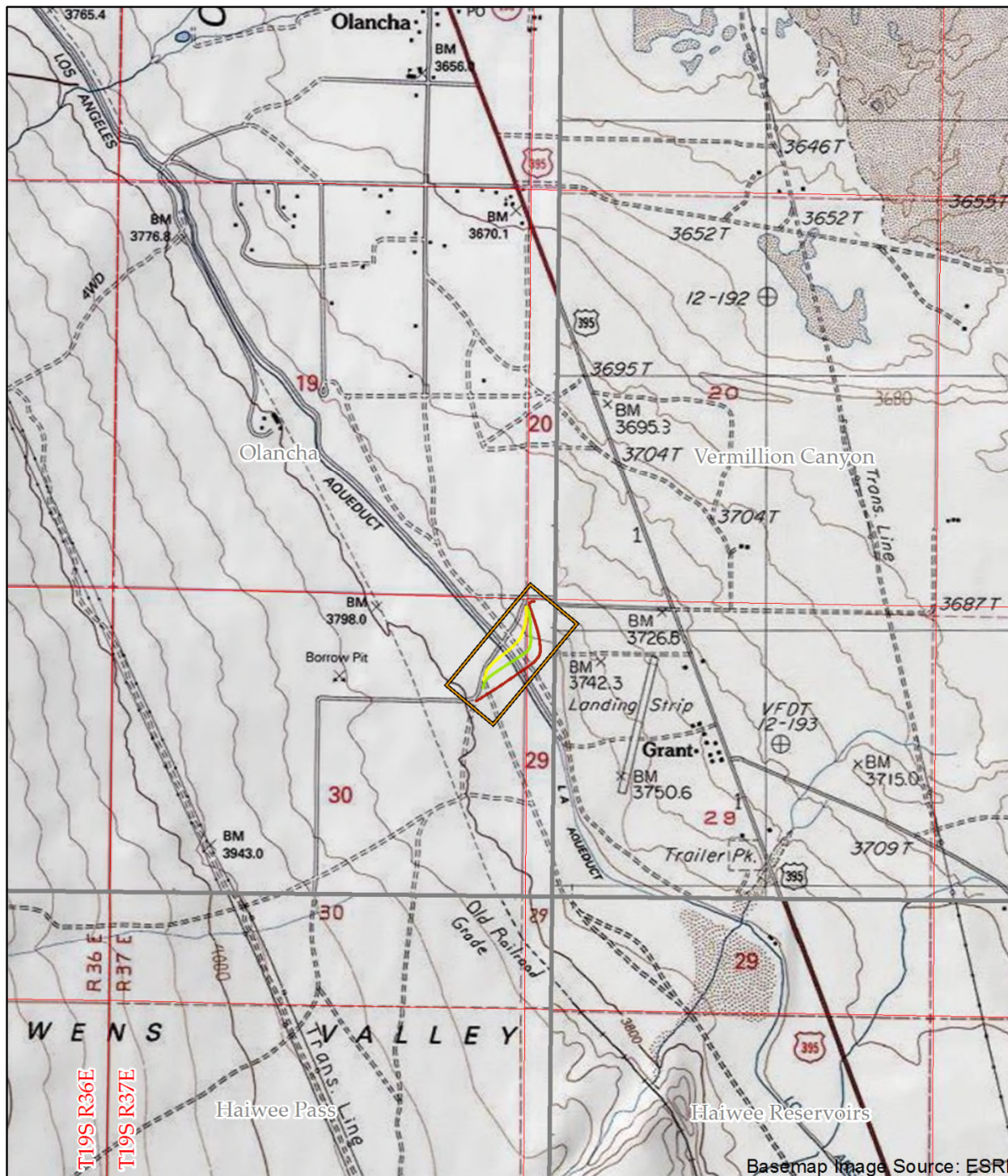
If you have any concerns or knowledge of cultural resources within the project area, please contact Caltrans District 9 Associate Archaeologist Trevor C. Pratt at (760) 872-3021 or by email at trevor.pratt@dot.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Chantel R. Brown".

Chantel Brown
Program Manager, EAII

Enclosure: Project Location Maps



Base map image Source: ESRI

Walker Creek Bridge Replacement Project

- Alternate 1
- Alternate 2
- Alternate 3
- Cultural Survey Area



1:24,000
NAD 83
UTM Zone 11N
Map Produced by:
Montana M. Long
ASM Affiliates, Inc.
09/21/2015

AB 52 Consultation Records

Record of AB 52 Consultation

Name	Tribe	Address	cty, state, zip	Date Sent	Return Receipt?	Received by:	On:	Response due by:	Response:
Mary Wuester, Chairperson	Lone Pine Paiute-Shoshone Tribe	PO Box 747	Lone Pine, CA 93545	10/10/2017	Yes	David Lin	10/18/2017	11/17/2017	
Norman Wilder, Chairperson	Fort Independence Indian Community of Paiutes	PO Box 67	Independence, CA 93526	10/10/2017	Yes	Katie Stine	10/11/2017	11/10/2017	
George Gholson, Chairperson	Timbisha Shoshone Tribe	121 W. Line Street	Bishop, CA 93514	10/10/2017	Yes	P. Martinez	10/12/2017	11/11/2017	
Chairperson	Bishop Paiute Tribe	50 Tu Su Lane	Bishop, CA 93514	10/10/2017	Yes	Chiyone Parker	10/12/2017	11/11/2017	
Genevieve Jones, Chairperson	Big Pine Paiute Tribe of the Owens Valley	PO Box 700	Big Pine, CA 93513	10/10/2017	Yes	J	10/16/2017	11/15/2017	
Valerie Spoonhunter, Interim Tribal Administrator	Bishop Paiute Tribe	50 Tu Su Lane	Bishop, CA 93514	10/10/2017	Yes	Chiyone Parker	10/12/2017	11/11/2017	
Tribal Historic Preservation Officer	Bishop Paiute Tribe	50 Tu Su Lane	Bishop, CA 93514	10/10/2017	Yes	Chiyone Parker	10/12/2017	11/11/2017	No comments, email response on 10/26
Michael Mirelez, Cultural Resource Coordinator	Torres Martinez Desert Cahuilla Indians	P.O. Box 1160	Thermal, CA 92274	10/10/2017	Yes	Jones	10/16/2017	11/15/2017	
Darrell Mike, Tribal Chairperson	Twenty-Nine Palms Band of Mission Indians	46-200 Harrison Place	Coachella, CA 92236	10/10/2017	Yes	Christian Chavez	10/12/2017	11/11/2017	
Anthony Madrigal, Jr., Tribal Grants Administrator	Twenty-Nine Palms Band of Mission Indians	46-200 Harrison Place	Coachella, CA 92236	10/10/2017	Yes	Christian Chavez	10/12/2017	11/11/2017	11/3 - Letter stating no interest in project
Doug Todd Welmas	Cabazon Band of the Mission Indians	84-245 Indio Springs Parkway	Indio, CA 92203	10/10/2017	Yes	Henry Alberto	10/12/2017	11/11/2017	
Jacquelyn Barnum, Environmental Director	Cabazon Band of the Mission Indians	84-245 Indio Springs Parkway	Indio, CA 92203	10/10/2017	Yes	Henry Alberto	10/12/2017	11/11/2017	



BOARD OF SUPERVISORS COUNTY OF INYO

P. O. DRAWER N • INDEPENDENCE, CALIFORNIA 93526
TELEPHONE (760) 878-0373
email: dellis@inyocounty.us



October 6, 2017

Identical letters sent to all
tribes included in table above

Genevieve Jones, Chairperson
Big Pine Paiute Tribe of the Owens Valley
PO Box 700
Big Pine, CA 93513

RE: Assembly Bill 52 Consultation (Per Public Resources Code 21080.3.1)

Chairperson Jones,

The Inyo County Public Works Department is developing a project to replace the Los Angeles Aqueduct Bridge (County Bridge 48C0039) on Walker Creek Road. The project will be funded through the Federal Highway Bridge Program and Federal Toll Credits. The new bridge will be located approximately 300 feet south of the existing bridge and will involve realigning approximately 1,200 feet of roadway. The existing bridge Walker Creek Bridge will be closed to public vehicular traffic.

Maps are attached to this letter that show the locations of the existing bridge and proposed new bridge, as well as a map generally showing the project location. This project will be subject to a California Environmental Quality Act (CEQA) review.

As specified by Public Resources Code 21080.3.1 the County is hereby inviting local Tribes to consultation prior to the release of the CEQA environmental document. Also pursuant to Public Resources Code 21080.3.1, the Tribes must request consultation within 30-days of receipt of this correspondence.

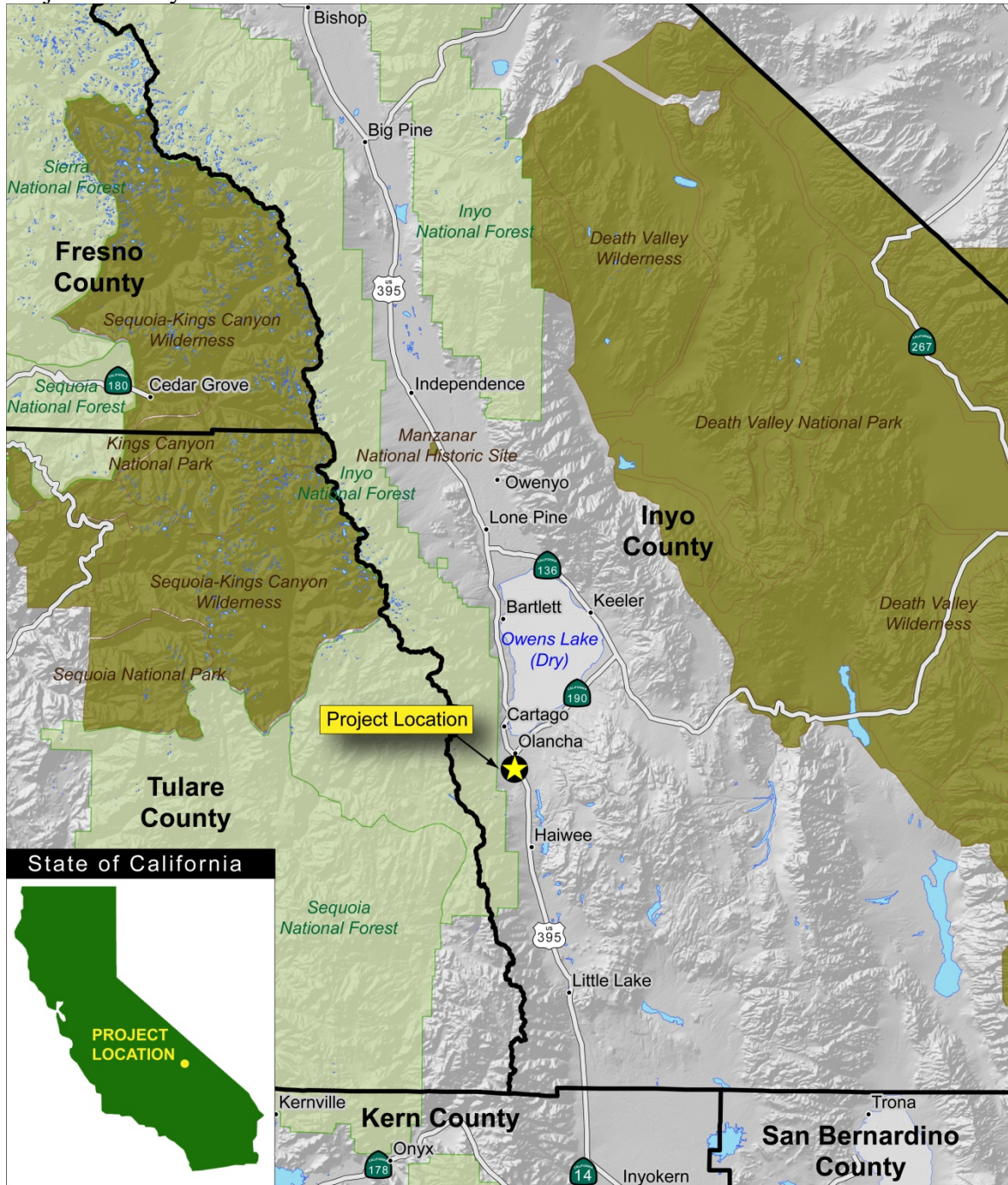
If you wish to initiate the consultation process or would like more information, please contact:

Cathreen Richards, Planning Director
PO Drawer L,
Independence, CA 93526
760-878-0263
crichards@inyocounty.us

Sincerely,

Mark Tillemans, Chairperson
Inyo County Board of Supervisors

Project Vicinity



SOURCES: Esri 2013 and Panorama Environmental, Inc. 2013

Scale: 1:1,000,000

LEGEND



Project Location



U.S. Highway



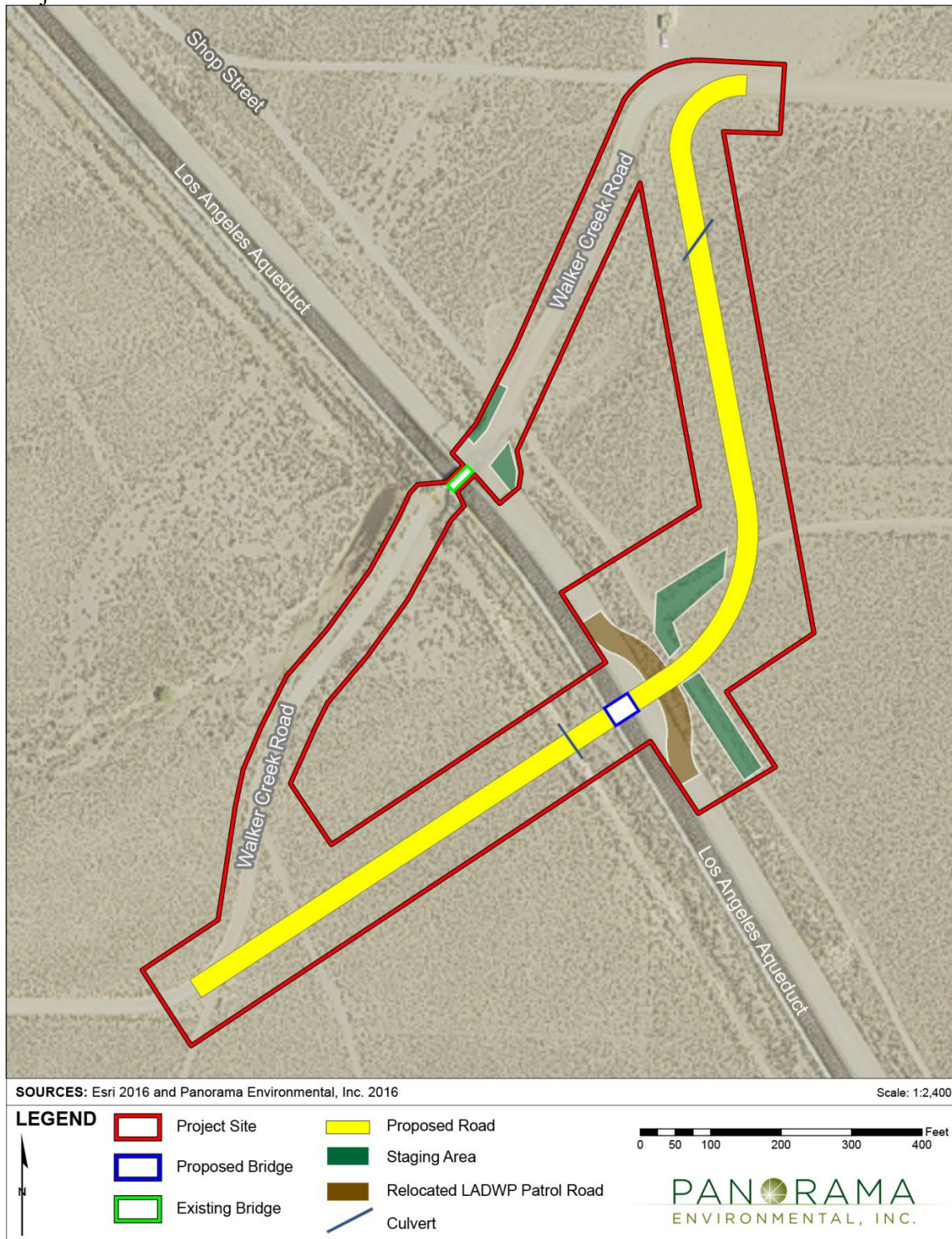
CA State Route

0 15 30 Miles

PANORAMA
ENVIRONMENTAL, INC.

MEMBERS OF THE BOARD • DAN TOTEROH • JEFF GRIFFITHS • RICK PUCCI • MARK TILLEMANS • MATT KINGSLEY
KEVIN D. CARUNCHIO • Clerk of the Board • DARCY ELLIS • Assistant Clerk of the Board

Project Site





TWENTY-NINE PALMS BAND OF MISSION INDIANS

46-200 Harrison Place . Coachella, California . 92236 . Ph. 760.863.2444 . Fax: 760.863.2449

November 3, 2017

Cathreen Richards, Planning Director
County of Inyo
P.O. Box Drawer L
Independence, CA 93526

**RE: Assembly Bill 52 Consultation (Per California Public Resources Code § 21080.3.1)
Los Angeles Aqueduct Bridge (County Bridge 48C0039) Walker Creek Road**

Dear Ms. Richards,

This letter is in regards to consultation in compliance with AB 52 (California Public Resources Code § 21080.3.1), for the formal notification for the replacement of the Los Angeles Aqueduct Bridge (48C0039) located on Walker Creek Road. The Tribal Historic Preservation Office (THPO) is not aware of any additional archaeological/cultural sites or properties in the project area that pertain to the Twenty-Nine Palms Band of Mission Indians (Tribe). The THPO currently has no interest in the project and defers to the comments of other affiliated tribes. If there are inadvertent discoveries of archaeological remains or resources, construction should stop immediately, and the appropriate agency and tribe(s) should be notified.

If you have any questions, please do not hesitate to contact the THPO at (760) 775-3259 or by email: TNPConsultation@29palmsbomi-nsn.gov.

Sincerely,

Anthony Madrigal, Jr.
Tribal Historic Preservation Officer

cc: Darrell Mike, Twenty-Nine Palms Tribal Chairman
Sarah Bliss, Twenty-Nine Palms Tribal Cultural Specialist

From: Monty Bengochia [mailto:monty.bengochia@bishoppaiute.org]
Sent: Thursday, October 26, 2017 10:13 AM
To: Cathreen Richards
Subject: Inyo County Public Works --County Bridge 48C-0011 & 48C0039

At present , the Bishop Paiute Tribal Historic Preservation Office has no comments on the County bridge replacement projects.

Thank You very much.

APPENDIX D

Comments and Responses

COMMENTS AND RESPONSES

INTRODUCTION

This appendix contains the comments on the Draft Initial Study/Mitigated Negative Declaration (IS/MND) received during the public comment period extending from November 5, 2018 to December 4, 2018. The Native American Heritage Commission was the only commenter during this period, providing a letter dated November 27, 2018.

COMMENTS AND RESPONSES

The entire text of the comment letter from the Native American Heritage Commission is included in this document. Each of the individual comments within the letter have been bracketed and responses to each comment are provided following the comment letter. If text revisions were made to IS/MND based on the comments, the revisions are provided within the response to the specific comment and are indicated with ~~strikeout~~ for deletions of text and underline for new text. These text edits have also been reflected in the IS/MND.

APPENDIX D COMMENTS AND RESPONSES

1.1.1 Comment Letter A – Native American Heritage Commission

STATE OF CALIFORNIA

Edmund G. Brown Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710



November 27, 2018

Ashley Helms
Inyo County
168 N. Edwards Street
P. O. Drawer Q
Independence, CA 93526

Also sent via e-mail: ahelms@inyocounty.us

Re: SCH# 2018082012, Walker Creek Road Bridge Replacement Project, Community of Olancha; Inyo County, California

Dear Ms. Helms:

The Native American Heritage Commission (NAHC) has reviewed the Mitigated Negative Declaration (MND) prepared for the project referenced above. The review included the Introduction, Project Description, and Mitigation Measures; the Initial Study Environmental Checklist section 2.6, Cultural Resources prepared by Panorama Environmental, Inc. and ASM Affiliates for Inyo County. We have the following concerns:

1. There are no mitigation measures specifically addressing Tribal Cultural Resources separately and distinctly from Archaeological Resources. Mitigation measures must take Tribal Cultural Resources into consideration as required under AB-52, **with or without consultation** occurring. Mitigation language for archaeological resources is not always appropriate for measures specifically for handling Tribal Cultural Resources. Sample mitigation measures for Tribal Cultural Resources can be found in the CEQA guidelines at http://opr.ca.gov/docs/Revised_AB_52_Technical_Advisory_March_2017.pdf
2. The Most Likely Descendant timeline in the Environmental Analysis, Cultural Resources section (d) is incorrect. Public Resources Code section 5097.98 specifically states "the descendants shall complete their inspection and make their recommendations or preferences within **48 hours after being allowed access to the site**".
3. Cultural Resource assessments are incomplete and/or out of date (2015). A copy of the report was not included in the documents submitted for review.

A-1

A-2

A-3

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3714 if you have any questions.

Sincerely,

Gayle Totton, B.S., M.A., Ph.D.
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

APPENDIX D COMMENTS AND RESPONSES

ADDITIONAL INFORMATION

The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

A-4

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for “tribal cultural resources”⁵, that now includes “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.”⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPA.pdf, entitled “Tribal Consultation Under AB 52: Requirements and Best Practices”.

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC’s recommendations for conducting cultural resources assessments is also attached.

A-5

Pertinent Statutory Information:

Under AB 52:

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.⁹ and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report.** For purposes of AB 52, “consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects.¹¹

1. The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.

¹ Pub. Resources Code § 21000 et seq.

² Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)

³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)

⁴ Government Code 65352.3

⁵ Pub. Resources Code § 21074

⁶ Pub. Resources Code § 21084.2

⁷ Pub. Resources Code § 21084.3 (a)

⁸ 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

⁹ Pub. Resources Code § 21080.3.1, subds. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b)

¹¹ Pub. Resources Code § 21080.3.2 (a)

APPENDIX D COMMENTS AND RESPONSES

c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.¹²

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.¹³

If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program**, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).¹⁷

An environmental impact report **may not be certified**, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**¹⁹
- **There is no Statutory Time Limit on Tribal Consultation under the law.**

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

¹⁶ Pub. Resources Code § 21082.3 (a)

¹⁷ Pub. Resources Code § 21082.3 (e)

¹⁸ Pub. Resources Code § 21082.3 (d)

¹⁹ (Gov. Code § 65352.3 (a)(2)).

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- **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research,²⁰ the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.²¹
- **Conclusion Tribal Consultation:** Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.²²

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
 - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
 - The request form can be found at <http://nahc.ca.gov/resources/forms/>.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - If part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have been already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.²³
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.²⁴

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.²⁵ In areas of identified

²⁰ pursuant to Gov. Code section 65040.2,

²¹ (Gov. Code § 65352.3 (b)).

²² (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

²³ (Civ. Code § 815.3 (c)).

²⁴ (Pub. Resources Code § 5097.991).

²⁵ per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

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archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.



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1.1.2 Responses to Comment Letter A

A-1 In the event that buried tribal cultural resources are encountered during construction, the Applicant will be required to comply with Inyo County Code (ICC). Chapter 9.52 of the ICC covers the disturbance of archaeological, paleontological, historical and features. Under ICC Chapter 9.52.040, the Applicant is required to notify the county planning commission in the event that a Native American burial site is discovered (Inyo County, 2018). The commission shall notify interested Native American tribes in the county, within three days of notification to the commission by the Applicant. The interested Native American tribes shall implement appropriate treatment measures for the discovery within fourteen days of notice.

Section 2.6.2 Impact E) in the Initial Study was revised to clarify the impact analysis on Tribal Cultural Resources, as follows:

E) 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:

a) 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

The only eligible resource within the project site is the Los Angeles Aqueduct, as discussed in Impact A. No other listed or eligible resources, including prehistoric cultural resources, are located have been recorded within one mile of the project site. Pursuant to AB 52, Inyo County Board of Supervisors sent a formal notification to representatives of the eight Native American tribes with traditional or cultural affiliation to the project area. None of the tribes contacted requested consultation under AB 52 or identified tribal cultural resources or the potential for tribal cultural resources in the project vicinity. The proposed project would not impact a listed or eligible tribal cultural resources. No mitigation is required.

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

None of the tribes contacted pursuant to AB 52 requested consultation regarding the proposed project (refer to Table 2.6-3). No known tribal cultural resources are present on the project site or in the immediate area. No impact would occur and no mitigation is required.

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A-2 The **Mitigation Measure CUL-3: Human Remains** has been revised to correct the Most Likely Descendant timeline in the IS/MND, as follows:

The NAHC shall immediately notify the identified Most Likely Descendant (MLD), and the MLD has ~~24~~ 48 hours from the time they are granted access to the site to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within ~~24~~ 48 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC shall mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

A-3 Inyo County's subconsultant, ASM Affiliates, completed a cultural resources investigation to satisfy Section 106 of the National Historic Preservation Act (NHPA) and in accordance with CEQA. The cultural resources investigation included:

- A background records search at the Eastern Information Center, University of California, Riverside, and literature review to determine if any known archaeological sites were present in the Area of Potential Effect (APE) and/or whether the area had been previously and systematically studied by archaeologists;
- A search of the NAHC *Sacred Lands File* to determine if any traditional cultural places or cultural landscapes have been identified within the area;
- An on-foot, intensive inventory of the archaeological APE to identify and record previously undiscovered cultural resources and to examine known sites;
- Subsurface testing to determine the presence or absence of cultural remains and define vertical and horizontal site boundaries; and
- An assessment/evaluation of any such resources found within the subject property.

Additionally, ASM Affiliates notified Native American tribes who may be interested in commenting on the conduct and results of the project or who may have knowledge of traditional lands or cultural places located within the project area.

ASM recorded or updated a total of seven cultural resources of which two were newly identified sites (one prehistoric, one historic), three were newly recorded road segments, and two were updates to previously recorded sites within the project area. In addition, six prehistoric isolated finds were recorded. Two previously-identified cultural resources and two newly-identified cultural resources were identified

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within the project APE. Only one resource, the Los Angeles Aqueduct, is eligible for listing on the National Register of Historic Places. The Los Angeles Aqueduct would be fully avoided by the proposed bridge and the bridge would not affect the eligibility of the Los Angeles Aqueduct.

ASM Affiliates also identified a roughly east-west trending, single-lane, modern bladed road intersects the project area east of the aqueduct. This road is positioned atop the east-west trending airstrip (or taxiing lane) associated with the north end of the Grant Airport. The airport (beyond the APE) is historic in age, but the road overtop the taxiing lane does not appear on any historic maps, nor is it present on aerial images prior to 1976. The first occurrence appears to be on an aerial image from 1976. As such, it was not 50 years old at the time the of the survey and was, therefore, not recorded. At the time of publication of the CEQA document, the road is still not 50 years old. No other sites from around or before this time frame were identified for consideration in the report.

In 2017 the Los Angeles Department of Water and Power (LADWP) constructed the Western Patrol Road Project that involved construction of an unpaved road paralleling the west side of the Los Angeles Aqueduct in the vicinity of Walker Creek Road. No cultural resources were discovered during construction of the Western Patrol Road Project (Hays, 2019).

The County's cultural resources investigation considered all known eligible and potentially eligible cultural resources within the APE. No additional sites were discovered during the LADWP Western Patrol Road Project and no additional ground disturbance has occurred in the project area. As such, no changes in baseline conditions have occurred within the APE since the report was completed. Caltrans, as the NEPA lead agency approved the report in December 2017. The State Historic Preservation Officer has concurred with Caltrans' eligibility recommendations for resources on site (Office of Historic Preservation, 2018). It is Caltrans standard practice for reports to remain valid for a period of five years (Downard, 2018). The report findings are not out of date and the report requires no updating.

The Archaeological Survey Report/Historic Properties Survey Report contains confidential information. The confidential report is available to persons with appropriate qualifications. A redacted version of the report is also available upon request.

- A-4 This comment provides additional background information but does not specifically address the analysis in the Draft IS/MND. On September 2015, ASM Affiliates contacted the NAHC to inquire whether any records of registered cultural resources, sacred lands, traditional cultural properties, or areas of heritage sensitivity were known in the APE. The NAHC provided a consultation list of tribes with knowledge of traditional lands or cultural places within the project area. The County submitted

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notification letters consistent with Senate Bill 18 to all parties identified by the NAHC on October 1, 2015. Letters included a detailed project description, location, and results of the record search with maps of the APE. After no responses were received, ASM Affiliates conducted follow-up phone calls two weeks later. One tribe individual responded and presented as a Tribal Monitor during surface testing. Refer to Appendix C of the IS/MND for information regarding NAHC response to project notification and Tribal Consultation Efforts pursuant to Senate Bill 18.

On September 2017, the County submitted notification letters consistent with Assembly Bill 52 for consultation to eight Native American individuals and organizations. Two tribes responded to the County and expressed no interest in the project and no knowledge of tribal cultural resources in the project vicinity. To date, no additional responses have been received. Refer to Appendix C of the IS/MND for information about Tribal Consultation Efforts and responses to project notification pursuant to Assembly Bill 52.

- A-5 This comment provides additional background information but does not specifically address the analysis in the Draft IS/MND. Refer to Response to Comment A-4 for information regarding tribal consultation pursuant to Senate Bill 18 and Assembly Bill 52. Refer to Response to Comment A-3 for information regarding Cultural Resources Assessments conducted for the project. Refer to Response to Comment A-1 for information regarding mitigation measures related to impacts on Tribal Cultural Resources.

REFERENCES

Downard, B. (2018, December 28). Caltrans District 9 Local Assistance. (I. C. Ashley Helms, Interviewer)

Hays, J. (2019, January 9). Los Angeles Department of Water and Power. (P. E. Rita Wilke, Interviewer)

Inyo County. (2018). *9.52.040 Project or action-Discovery of Indian burial site*. Retrieved from Inyo County Code: <http://www.qcode.us/codes/inyocounty/>

Office of Historic Preservation. (2018, January 18). Determination of Eligibility for the Proposed Walker Creek Bridge Replacement Project near Grant, Inyo County, CA.

APPENDIX E

Mitigation Monitoring Plan

MITIGATION MONITORING PLAN

PROJECT SUMMARY

The proposed project includes replacing existing County Bridge 48C0039, which spans the Los Angeles Aqueduct approximately 0.5 mile west of the intersection of Walker Creek Road with U.S. 395. The proposed project would construct a new bridge approximately 375 feet southeast of the existing bridge. The new bridge would be approximately 32 feet wide, including a 28-foot clear roadway width. The bridge foundation would be constructed on either side of the Los Angeles Aqueduct using spread footings and concrete abutments. A minimum of 2 feet of clearance would be provided at the front face of the abutments for future maintenance and inspection under the bridge. The deck of the bridge would be approximately 60 feet long and made of concrete. A 10-foot-long concrete approach slab would be used at either side of the bridge to meet seismic design requirements. The approach roadway on both sides of the bridge would be realigned to improve sight distance and safety. The existing bridge would be closed to public vehicular traffic after construction of the new bridge.

This Mitigation Monitoring Plan (MMP) outlines procedures for the implementation of mitigation measures identified in the Walker Creek Road Bridge Replacement Project Initial Study/Mitigated Negative Declaration to avoid or reduce all potential environmental effects of the proposed project to less than significant levels. Inyo County Public Works Department (the County) and its contractors must fully comply with the conditions and measures described in this MMP.

MITIGATION MONITORING AND REPORTING REQUIREMENTS

The County prepared an Initial Study to identify and evaluate potential environmental impacts associated with the Walker Creek Road Bridge Replacement Project. Mitigation measures are defined in the IS to reduce potentially significant impacts of project construction and operation. All measures designated as mitigation measures reduce potential impacts to the associated resource to less than significant levels.

Approval of the project will require implementation and monitoring of all the mitigation measures identified in the IS. The California Environmental Quality Act (CEQA) Section 15097(a) requires that:

“... In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to

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mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.”

CEQA Section 15097(c) defines monitoring and reporting responsibilities of the lead agency.

“(c) The public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both. The choice of program may be guided by the following:

- (1) Reporting is suited to projects which have readily measurable or quantitative mitigation measures or which already involve regular review. For example, a report may be required upon issuance of final occupancy to a project whose mitigation measures were confirmed by building inspection.
- (2) Monitoring is suited to projects with complex mitigation measures, such as wetlands restoration or archeological protection, which may exceed the expertise of the local agency to oversee, are expected to be implemented over a period of time, or require careful implementation to assure compliance.
- (3) Reporting and monitoring are suited to all but the most simple projects. Monitoring ensures that project compliance is checked on a regular basis during and, if necessary after, implementation. Reporting ensures that the approving agency is informed of compliance with mitigation requirements.”

This MMP is meant to facilitate implementation and monitoring of the mitigation measures to ensure that measures are executed. This process protects against the risk of non-compliance.

The purpose of the MMP is to:

- Summarize the mitigation required for the project
- Comply with requirements of CEQA and the CEQA Guidelines

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- Clearly define parties responsible for implementing and monitoring the mitigation measures
- Provide a plan for how to organize the measures into a format that can be readily implemented by the County and monitored

MMP COMPONENTS

The MMP provides a summary of all mitigation measures that will be implemented for the project. The mitigation measures are organized into three tables based on the timeframe for implementation:

- Table E-1: Mitigation Measures - Prior to Construction
- Table E-2: Mitigation Measures - During Construction
- Table E-3: Mitigation Measures - After Construction

Mitigation measures could be applicable during one or more implementation phase. Each mitigation measure is accompanied with identification of:

- Application Locations – locations where the mitigation measure will be implemented.
- Monitoring/Reporting Action – the monitoring and/or reporting actions to be undertaken to ensure the measure is implemented.
- Responsible and Involved Parties – the party or parties that will undertake the measure and will monitor the measure to ensure it is implemented in accordance with this MMP.

The responsible and involve parties will utilize the MMP to identify actions that must take place to implement each mitigation measure, the time of those actions, and the parties responsible for implementing and monitoring the actions.

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Table E-1 Mitigation Measures - Prior to Construction

Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
MITIGATION MEASURE AIR-1: Dust and Engine Emissions Control Measures Construction activities shall comply with District Rule 401 regulations. In addition to reasonable precautions outlined in Rule 401, the following measures shall be incorporated during the installation of the bridge and realigned roadway approaches and the revegetation of the abandoned roadway: 1. Water or dust palliatives shall be applied on dirt roads, material stockpiles, and other surfaces that could give rise to airborne dust and are subject to disturbance. 2. Water or dust palliatives shall be applied to prevent particulate matter from becoming airborne during the transportation or stockpiling of dusty materials. 3. Trucks hauling material shall be covered during transit. 4. Roadways shall be maintained in a clean condition. 5. Vehicles shall be limited to 15 miles per hour (mph) on unpaved roads, to the extent feasible. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.	All project areas	• Dust complaint signs are posted adequately • Brief crews regarding idling limitations	• Inyo County Public Works Department • Construction contractor
MITIGATION MEASURE BIO-1: Special-Status Plant Species A pre-construction botanical survey will be conducted for all special-status plant species with potential to occur in the project vicinity. A qualified biologist will conduct the survey during the blooming season (April – July) within one year of construction. If any special-status plant species are observed, the location of the	All project areas where suitable habitat for special-status plants is present	• Special-status plant species pre-construction survey is conducted during the blooming season (April-July) within one year of construction	• Inyo County Public Works Department • Construction contractor • Qualified biologist

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
population will be recorded and the following measures will be implemented: - Relocate construction staging areas and access roads as necessary to minimize direct impacts - Fence off areas of the population outside planned construction zones - Prior to ground disturbance in the areas where special-status plant species populations will be impacted by construction, scrape the top 2 inches of topsoil and stockpile it on site temporarily; after construction is complete, return it to areas outside the footprint of permanent infrastructure, making sure to spread it 0.8 to 2 inches deep and being careful to avoid compaction of the soil or other disturbance to soil and vegetation.		Special-status plant species are flagged and/or fenced for avoidance	
MITIGATION MEASURE BIO-2: Mojave Desert Tortoise Measures The following measures shall be implemented during construction to reduce impacts to Mojave desert tortoise: A CDFW- and USFWS-authorized desert tortoise biologist shall conduct pre-construction surveys prior to ground disturbance, within 14 days prior to ground disturbance; these surveys will be performed at a level of intensity similar to a clearance survey that is sufficient to locate any desert tortoise, desert tortoise burrows, or other sign of recent occupancy within the project area; surveys will not involve handling desert tortoises, excavating burrows, or other activities that would constitute take; the purpose of the survey is to ensure no desert tortoise have established in the area since the protocol level surveys and before desert tortoise fence installation. If these surveys locate evidence of recent occupancy, the County should contact CDFW and Caltrans to determine if additional consultation is needed prior to installation of fencing or other commencement of project activities. Caltrans shall be responsible for further consultation with USFWS, as defined through informal consultation with USFWS under Section 7 of the Endangered Species Act.	All project areas where suitable habitat for Mojave Desert Tortoise is present	- A qualified biologist conducts pre-construction survey for Mojave Desert Tortoise within 14 days prior to construction - Desert tortoise exclusionary fencing is installed - Qualified biologist review and approve designated work areas, including access roads	- Inyo County Public Works Department - Construction contractor - Qualified biologist - USFWS - CDFW - Caltrans

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
• If surveys do not identify evidence that work areas are occupied by desert tortoises, USFWS-approved desert tortoise exclusionary fencing will be installed around the perimeter of the project impact area prior to construction start; desert tortoise fencing will be included on the detailed construction plans; • Vegetation removal shall be minimized and vehicle travel shall be confined to designated routes; • A qualified biologist will be present during all ground disturbing and construction activities to monitor for any desert tortoises that may have been missed during pre-construction surveys or that may have entered work sites through damaged exclusion fencing. The biological monitor shall have the authority to stop work in the event that a desert tortoise is located within the work area. If this occurs, the County will contact CDFW and Caltrans will contact USFWS to determine if additional consultation is needed prior to resuming construction activities. • All trash and debris shall be disposed of in sealed containers and removed from the site at the end of each day; • The following "Look Before You Move" on-site protective measures shall be implemented: a. All employees and contractors on the project site shall look under vehicles and equipment for the presence of desert tortoise before moving the vehicle or equipment. b. If a desert tortoise is observed, no vehicles or equipment shall be moved until the animal leaves voluntarily. c. If the animal is located under a vehicle or piece of equipment within the fenced project area, Caltrans will contact the USFWS to determine if additional consultation is required. d. All employees and contractors shall adhere to a "Do Not Touch" policy that applies to all workers on the project; and e. All workers shall be advised that equipment and vehicles must remain within the designated work areas, to be			

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
provided and approved by the qualified biological monitor prior to the start of construction.			
MITIGATION MEASURE BIO-3: Worker Education Program The qualified biologist will provide a "Worker Environmental Awareness Training" on the desert tortoise prior to construction start; the training will include: • Explanation of the avoidance and minimization measures for biological resources and the possible penalties for not adhering to them; • General safety protocols such as hazardous substance spill prevention and containment measures, fire prevention and protection measures, and speed limits; • Explanation of the sensitivity and locations of the biological resources within and adjacent to work areas, and proper identification of these resources; • Natural history information on the sensitive biological resources including information on physical characteristics, photographs, distribution, behavior, ecology, sensitivity to human activities, legal protection, reporting requirements, and conservation measures required for the project; • Contact information for the biological monitor(s); • Notification to all workers to report all observations of special-status species and their sign to the biological monitor; • A training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and • Information regarding the effects of predation on the desert tortoise by common ravens and other predators.	N/A	• All project personnel are trained prior to construction start	• Inyo County Public Works Department • Construction contractor • Qualified biologist
MM BIO-5: Mojave Desert Tortoise and Mohave Ground Squirrel Habitat Compensation Habitat quality for both desert tortoise and Mohave ground squirrel is considered low; therefore, temporarily and permanently impacted desert tortoise/Mohave ground squirrel habitat shall be compensated for at a minimum ratio of 3:1 for poor habitat. The 1.52 acres of impacts to potentially suitable desert tortoise and	Where habitat impacts occur	• Access habitat impacts • Habitat compensation through purchasing mitigation bank credit or purchasing suitable habitat to be preserved	• Inyo County Public Works Department • CDFW

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
Mohave ground squirrel habitat shall be compensated for through either the purchase of mitigation bank credits, or the purchase of suitable desert tortoise and Mohave ground squirrel habitat to be preserved in perpetuity, or other compensation method as required and approved by CDFW. If it is suitable for both species, any acreage or credits purchased can be combined and serve to compensate for both species. The County shall consult with and, if necessary, obtain permits from CDFW and implement all provisions and requirements for tortoise habitat compensation. Should the permit requirements and compensation ratio be different than provided for in this measure, the conditions in the permit shall prevail.		County provide evidence of compensation to CDFW	
MITIGATION MEASURE BIO-6: Mohave Ground Squirrel Measures The following measures shall be implemented during construction to reduce impacts on Mohave ground squirrel: - A qualified biological monitor shall be on site during ground disturbing activities. The name, qualifications, and phone number of the biological monitor shall be provided to a CDFW regional representative at least fourteen (14) days before ground disturbing activities. - To minimize impacts on Mohave ground squirrel habitat, vegetation removal shall be minimized and vehicle travel shall be confined to designated routes. Cross-country (off-road) vehicle travel shall be prohibited and signs shall be posted to this effect during project construction. If Mohave ground squirrel are encountered, drivers shall stop, wait for the individual(s) to move off the road, and immediately notify the biological monitor of the location where the individual was observed. - To avoid impacts to Mohave ground squirrel movements or dispersal, the existing Walker Creek Road Bridge shall remain in place and unobstructed to Mohave ground squirrel. - The approved biological monitor shall inspect all open holes and trenches within the project site at the beginning, middle, and end of each day for trapped animals. To prevent inadvertent entrapment of Mohave ground squirrel or any	N/A	- Name, qualifications, and contact information of biological monitor provided to CDFW no fewer than 14 days prior to ground disturbance - All project personnel are trained on Mohave ground squirrel prior to working on the site	- Inyo County Public Works Department - Construction contractor - Biological monitor - CDFW

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
other animals, the biological monitor shall oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to enter and become entrapped. Escape ramps shall be installed in holes greater than two feet deep that do not hold water or other material, to allow animals to escape. Before holes or trenches are filled, the biological monitor shall thoroughly inspect them for trapped animals. If any worker discovers that Mohave ground squirrel have become trapped, they shall halt project-related activities and notify the biological monitor immediately. Project workers and the biological monitor shall allow the Mohave ground squirrel to escape out of harm's way before allowing work to continue. The use of temporary fencing, around the perimeter of trenches or holes is an acceptable minimization measure. • The biological monitor shall fully excavate by hand all burrows or scope each burrow within the project area that are suspected or known to be occupied by Mohave ground squirrel. The biologist shall allow the Mohave ground squirrel encountered in the excavated burrows during their active period to escape out of harm's way. During the dormant period (September – March), the biologist shall collect and immediately relocate the Mohave ground squirrel to an artificial burrow at a protected off-site location approved in advance by CDFW's regional representative. The covered species may only be relocated by the approved biological monitor. The approved biological monitor shall prepare relocation burrows in the following manner: (1) dig a hole of at least 2 feet deep; (2) install a 9-inch-diameter non-collapsible plastic container, which shall be connected to a 3-inch diameter, corrugated, non-collapsible pipe that runs to the ground surface at a 45-degree angle; (3) the biological monitor shall place the Mohave ground squirrel in the artificial burrow and lightly plug the burrow mouth with soil in a manner that is similar to a natural Mohave ground squirrel burrow.			

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
Prior to ground disturbing activities, all workers on the project site shall receive training on Mohave ground squirrel ecology, legal protections, and penalties for impacts to Mohave ground squirrel as part of the Worker Environmental Awareness Training (WEAT; refer to Mitigation Measure BIO-3)			
MITIGATION MEASURE BIO-7: American Badger and Desert Kit Fox Mitigation and Monitoring Plan No fewer than 60 days prior to the start of any pre-construction site mobilization, Inyo County shall provide CDFW with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan (plan) for approval. The final plan shall include, but is not limited to, the following procedures and impact avoidance measures: <i>Pre-Construction Measures</i> - A preconstruction survey for kit fox or American badger dens shall be conducted by a qualified biologist within 14 days prior to construction commencement. The survey shall include the entire project site and a 20-foot buffer around disturbed areas. If dens are detected each den shall be classified as inactive, potentially active, or definitely active. - Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. - Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. - If no tracks are observed in the tracking medium or no photos of the target species are captured after three consecutive nights, the den shall be excavated and backfilled by hand. - If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be	The entire project site and a 20-foot buffer around disturbed areas	- Provide Draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan to CDFW no fewer than 60 days prior to project construction - A qualified biologist conducts preconstruction survey within 14 days prior to construction commencement - Excavate and backfill inactive dens - Conduct monitoring of potentially and definitely active dens - Contact CDFW within 24 hours if an active natal den or kit fox mortality is observed	- Inyo County Public Works Department - Construction contractor - Qualified biologist - CDFW

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. - If an active natal den is detected on the site, the CDFW shall be contacted within 24 hours to determine the appropriate course of action to minimize the potential for harm or mortality. The course of action would depend on the age of the pups, location of the den on the site (e.g., is the den in a central area or in a perimeter location), status of the perimeter site fence (completed or not), and the pending construction activities proposed near the den. A no-disturbance buffer will be defined by the qualified biologist, which shall be maintained around active natal dens. <i>Construction Measures</i> - All vehicle and equipment shall observe a daytime speed limit of 15-mph. All vehicle and equipment shall observe a night-time speed limit of 10-mph. - To prevent inadvertent entrapment of badgers, kit foxes, or other animals during construction phase of the proposed project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, thorough inspections for trapped animals shall occur. If at any time a trapped or injured badger or kit fox is discovered, CDFW shall be contracted in writing within 24 hours. - All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for badger or kit fox before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a badger or kit fox is discovered inside a pipe, that section of pipe shall not be moved until CDFW has been consulted. - All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed			

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
containers and removed at least once a week from the construction or project site. • No firearms shall be allowed on the project site. • Use of rodenticides and herbicides on or adjacent to the project site shall be restricted. This is necessary to prevent primary or secondary poisoning of badgers or kit foxes and the depletion of prey populations on which they depend. All uses of rodenticides and herbicides should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation. If rodent control must be conducted, zinc phosphide shall be used because of a proven low risk to badger and kit fox. • A biological monitor shall be appointed by the County who will be the point of contact for any employee or contractor who might inadvertently kill or injure a badger or kit fox or who finds a dead, injured or entrapped badger or kit fox. The biological monitor shall be identified during the employee education program and their name and telephone number shall be provided to CDFW. • In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. <i>Distemper Measures</i> • The following measures are required to reduce the likelihood of distemper transmission: ◦ No pets shall be allowed on the site prior to or during construction, with the possible exception of kit fox scat detection dogs during preconstruction surveys, and then only with prior CDFW approval; ◦ Any kit fox hazing activities that include the use of animal repellents such as coyote urine must be cleared through CDFW prior to use; and ◦ Any documented kit fox mortality shall be reported to CDFW and within 24 hours of identification. If a dead kit fox is observed, it shall be retained and protected from			

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
scavengers until CDFW determines if the collection of necropsy samples is justified.			
MITIGATION MEASURE BIO-8: Special-Status Bats A preconstruction survey for Pallid bats shall be conducted by a qualified biologist within 14 days prior to construction commencement, and for any roosting bats underneath the existing bridge, if construction work is to occur between April and August. If roosting bats are observed: • Work activities shall not occur within 50 feet of the existing bridge. Travel over the bridge would still be permissible as roosts were likely established with baseline noise level from existing vehicle access. • Lights are not to be used under or in the vicinity of the existing bridge during the roosting season, between April and August. • Combustion equipment, such as generators, pumps, and vehicles, are not to be parked or engines started under the existing bridge or within 50 feet.	Underneath the existing bridge	• A qualified biologist conducts survey for Pallid bats within 14 days prior to construction commencement, if construction work is to occur between April and August • Establish a 50-foot buffer of the existing bridge if roosting bats are observed	• Inyo County Public Works Department • Construction contractor • Qualified biologist
MITIGATION MEASURE BIO-9: Nesting Bird Measures • If project activities are scheduled to occur between February 1 and September 30, the County shall prepare a Nesting Bird Plan (NBP). The County shall provide CDFW with the opportunity to review and comment on the plan, by providing it no later than 30 days prior to the initiation of construction activities. The NBP will include project-specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with applicable laws related to nesting birds and birds of prey. The NBP shall at a minimum include: ◦ Monitoring protocols ◦ Survey timing and duration ◦ The creation, maintenance, and submittal to CDFW of a bird-nesting log ◦ Project-specific avoidance and minimization measures. Avoidance and minimization measures shall include, at	Within 500 feet of the all work areas	• The County provides a Nesting Bird Plan for CDFW review with no later than 30 days prior to construction if construction occurs between February 1 and September 30 • A qualified biologist conducts surveys for active bird nests within 3 days prior to construction start • Establish no-disturbance buffers	• Inyo County Public Works Department • Construction contractor • Qualified biologist • CDFW

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
a minimum: project phasing and timing, monitoring of project-related noise, sound walls and buffers. - A pre-construction survey for active bird nests shall be conducted in all vegetated areas to be impacted and within 500 feet of the work areas. - The nesting bird survey shall be conducted by a qualified biologist within 3 days prior to construction start. - If no nesting or breeding behavior is observed, construction may proceed. - If an active nest is detected, a determination shall be made by a qualified biologist as to whether construction work shall affect the active nest. If it is determined that construction shall not affect an active nest, work may proceed. - If it is determined that construction activities are likely to impair the successful rearing of the young, a 'no-disturbance buffer' in the form of orange mesh Environmentally Sensitive Area (ESA) fencing shall be established around occupied nests to prevent destruction of the nest and to prevent disruption of breeding or rearing behavior. - The extent of the 'no-disturbance buffer' shall be determined by a qualified biologist in consultation with CDFW and shall depend on the level of noise or disturbance, line of sight between the nest and the disturbance area, the type of bird, ambient levels of noise and other disturbances, and other topographic or artificial barriers. 'No-disturbance buffers' shall be maintained until the end of the breeding season or until a qualified wildlife biologist has determined that the nestlings have fledged. - If a nest is discovered by workers on the project site during daily inspections, work shall stop and the biologist shall be called to the site.			
MITIGATION MEASURE CUL-1: Cultural Resources Sensitivity Training and Inadvertent Discovery A professional archaeologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) prior to initiation of site preparation and/or construction,	N/A	All supervisory staff receive cultural resources sensitivity training prior to the initiation of construction	- Inyo County Public Works Department - Construction contractor

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
to alert construction workers to the possibility of exposing significant historic and/or prehistoric archaeological resources within the proposed project area. The training shall include a discussion of the types of prehistoric or historic objects that could be exposed and how to recognize them, the need to stop excavation at a discovery and within 50 feet of a discovery, and the procedures to follow regarding discovery protection and notification. An "Alert Sheet" shall be posted in staging areas, such as in construction trailers, to alert personnel to the procedures and protocols to follow for the discovery of a potentially significant historic and/or prehistoric archaeological resources.¹ In the event that an archaeological resource is discovered, ground disturbing work shall be halted within 50 feet of the find, and a qualified cultural resources specialist/archaeologist shall be brought to the site. The qualified cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area. If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within			• Qualified Archaeologist

¹ Significant prehistoric cultural resources may include:

- a. Human bone, either isolated or intact burials.
- b. Habitation, occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
- c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
- d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
- e. Isolated prehistoric artifacts (Basin 2015).

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
50 feet of the find, and the qualified cultural resources specialist/archaeologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). If the resource is determined to be prehistoric, the evaluation and determination of appropriate measures shall be coordinated with regional Native American tribes. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources. If preservation-in-place and avoidance is not possible, data recovery shall be undertaken. The methods and results of data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by the County.			
MITIGATION MEASURE CUL-2: Paleontological Resources Sensitivity Training and Inadvertent Discovery A professional paleontologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) to alert construction workers to the possibility of exposing significant paleontological resources within the proposed project area. The training shall be conducted to recognize fossil materials in the event that any are uncovered during construction. In the event that a paleontological resource is uncovered during project implementation, all ground-disturbing work within a 50-foot radius shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts would occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether	N/A	All supervisory staff receive paleontological resources sensitivity training	- Inyo County Public Works Department - Construction contractor - Qualified paleontologist

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
it is “unique”² under CEQA, Appendix G, part V. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources. If preservation-in-place is not feasible and avoidance is not possible, the fossils shall be recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology (SVP) standard guidelines. Work may commence upon completion of treatment.			
MITIGATION MEASURE CUL-3: Human Remains If human remains are encountered during construction, ground disturbing work shall halt within 50 feet of any area where human	N/A	All project personnel receive training on human remains	Inyo County Public Works Department

² A unique paleontological resource is any fossil or assemblage of fossils, or paleontological resource site or formation that meets any one of the following criteria:

- Is the best example of its kind locally or regionally;
- Illustrates a paleontological or evolutionary principle (e.g. faunal succession; plant or animal relationships);
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data);
- Encompasses any part of a “type locality” of a fossil or formation;
- Contains a unique or particularly unusual assemblage of fossils;
- Occupies a unique position stratigraphically within a formation; or
- Occupies a unique position, proximally, distally or laterally within a formation’s extent or distribution (County of San Diego, 2009).

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Mitigation Measures	Applicable Locations	Monitoring/Reporting Action	Responsible and Involved Parties
remains or suspected human remains are encountered in compliance with California law (Health and Safety Code section 7050.5; PRC sections 5097.94, 5097.98, and 5097.99). The County shall contact the Medical Examiner at the county coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by the County. If the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall immediately notify the identified Most Likely Descendant (MLD), and the MLD has 48 hours from the time they are granted entry to the site to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 48 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC shall mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.		discovery prior to working on the site	Construction contractor
MITIGATION MEASURE HAZ-1: Fire Prevention Procedures - Prior to ground disturbing activities, all workers on the project site shall be trained regarding the proper handling and/or storage of materials posing a fire hazard, potential ignition sources (such as cigarettes or sparking equipment), and appropriate types and use of fire protection equipment. - Fire suppression equipment, including fire extinguishers, water, and shovels, shall be available on-site at all times. - Vehicles shall not be parked in vegetated areas. - Smoking shall be allowed only in designated areas. The designated areas must be unvegetated. Cigarette butts shall be properly contained and transported off-site for disposal	N/A	All project personnel receive fire prevention training	- Inyo County Public Works Department - Construction contractor

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Table E-2 Mitigation Measures - During Construction

Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
MITIGATION MEASURE AIR-1: Dust and Engine Emissions Control Measures Construction activities shall comply with District Rule 401 regulations. In addition to reasonable precautions outlined in Rule 401, the following measures shall be incorporated during the installation of the bridge and realigned roadway approaches and the revegetation of the abandoned roadway: 1. Water or dust palliatives shall be applied on dirt roads, material stockpiles, and other surfaces that could give rise to airborne dust and are subject to disturbance. 2. Water or dust palliatives shall be applied to prevent particulate matter from becoming airborne during the transportation or stockpiling of dusty materials. 3. Trucks hauling material shall be covered during transit. 4. Roadways shall be maintained in a clean condition. 5. Vehicles shall be limited to 15 miles per hour (mph) on unpaved roads, to the extent feasible. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer 's specifications. All equipment shall be checked by a certified visible emissions evaluator.	All project areas	• Exposed surfaces are watered • Haul trucks are adequately covered • Vehicle speeds limits are maintained • Idling times are minimized • All construction equipment is checked by a certified visible emissions evaluator	• Inyo County Public Works Department • Construction contractor
MITIGATION MEASURE BIO-1: Special-Status Plant Species A pre-construction botanical survey will be conducted for all special-status plant species with potential to occur in the project vicinity. A qualified biologist will conduct the survey during the blooming season (April – July) within one year of construction. If any special-status plant species are observed, the location of the	All project areas where suitable habitat for special-status plant species is present	• Topsoil is stockpiled • Special-status plant species are avoided and monitored appropriately	• Inyo County Public Works Department • Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
population will be recorded and the following measures will be implemented: - Relocate construction staging areas and access roads as necessary to minimize direct impacts - Fence off areas of the population outside planned construction zones - Prior to ground disturbance in the areas where special-status plant species populations will be impacted by construction, scrape the top 2 inches of topsoil and stockpile it on site temporarily; after construction is complete, return it to areas outside the footprint of permanent infrastructure, making sure to spread it 0.8 to 2 inches deep and being careful to avoid compaction of the soil or other disturbance to soil and vegetation.			
MITIGATION MEASURE BIO-2: Mojave Desert Tortoise Measures The following measures shall be implemented during construction to reduce impacts to Mojave desert tortoise: A CDFW- and USFWS-authorized desert tortoise biologist shall conduct pre-construction surveys prior to ground disturbance, within 14 days prior to ground disturbance; these surveys will be performed at a level of intensity similar to a clearance survey that is sufficient to locate any desert tortoise, desert tortoise burrows, or other sign of recent occupancy within the project area; surveys will not involve handling desert tortoises, excavating burrows, or other activities that would constitute take; the purpose of the survey is to ensure no desert tortoise have established in the area since the protocol level surveys and before desert tortoise fence installation. If these surveys locate evidence of recent occupancy, the County should contact CDFW and Caltrans to determine if additional consultation is needed prior to installation of fencing or other commencement of project activities. Caltrans shall be responsible for further consultation with USFWS, as defined through informal consultation with USFWS under Section 7 of the Endangered Species Act.	All project areas where suitable habitat for Mojave Desert Tortoise is present	- Vegetation removal is minimized - Vehicle travel is confined to designated routes - A qualified biologist is present during all ground disturbing and construction activities "Look Before You Move" on-site protective measures are implemented	- Inyo County Public Works Department - Construction contractor - USFWS - CDFW - Caltrans

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
• If surveys do not identify evidence that work areas are occupied by desert tortoises, USFWS-approved desert tortoise exclusionary fencing will be installed around the perimeter of the project impact area prior to construction start; desert tortoise fencing will be included on the detailed construction plans; • Vegetation removal shall be minimized and vehicle travel shall be confined to designated routes; • A qualified biologist will be present during all ground disturbing and construction activities to monitor for any desert tortoises that may have been missed during pre-construction surveys or that may have entered work sites through damaged exclusion fencing. The biological monitor shall have the authority to stop work in the event that a desert tortoise is located within the work area. If this occurs, the County will contact CDFW and Caltrans will contact USFWS to determine if additional consultation is needed prior to resuming construction activities. • All trash and debris shall be disposed of in sealed containers and removed from the site at the end of each day; • The following "Look Before You Move" on-site protective measures shall be implemented: a. All employees and contractors on the project site shall look under vehicles and equipment for the presence of desert tortoise before moving the vehicle or equipment. b. If a desert tortoise is observed, no vehicles or equipment shall be moved until the animal leaves voluntarily. c. If the animal is located under a vehicle or piece of equipment within the fenced project area, Caltrans will contact the USFWS to determine if additional consultation is required. d. All employees and contractors shall adhere to a "Do Not Touch" policy that applies to all workers on the project; and e. All workers shall be advised that equipment and vehicles must remain within the designated work areas, to be			

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
provided and approved by the qualified biological monitor prior to the start of construction.			
MITIGATION MEASURE BIO-3: Worker Education Program The qualified biologist will provide a “Worker Environmental Awareness Training” on the desert tortoise prior to construction start; the training will include: • Explanation of the avoidance and minimization measures for biological resources and the possible penalties for not adhering to them; • General safety protocols such as hazardous substance spill prevention and containment measures, fire prevention and protection measures, and speed limits; • Explanation of the sensitivity and locations of the biological resources within and adjacent to work areas, and proper identification of these resources; • Natural history information on the sensitive biological resources including information on physical characteristics, photographs, distribution, behavior, ecology, sensitivity to human activities, legal protection, reporting requirements, and conservation measures required for the project; • Contact information for the biological monitor(s); • Notification to all workers to report all observations of special-status species and their sign to the biological monitor; • A training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and • Information regarding the effects of predation on the desert tortoise by common ravens and other predators.	N/A	• All project personnel are trained prior to working on the site	• Inyo County Public Works Department • Construction contractor
MITIGATION MEASURE BIO-4: Weed Control Measures The following weed control measures shall be implemented during and following construction of the proposed project to reduce the spread of non-native plant species in the project area:	All project areas	• Weed control measures are implemented	• Inyo County Public Works Department • Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
• All native seed mix applied to the site will be from a certified native weed-free seed source; • All fill materials used for project construction and erosion control will come from a certified weed-free source; • Tools, equipment, and vehicles will be cleaned of soil and plant material before entering and leaving the worksite; • Equipment will be washed prior to transportation to the project impact area; and • Equipment and vehicles will be inspected by the qualified biologist to ensure no weed material is transported to the project impact area.			
MITIGATION MEASURE BIO-6: Mohave Ground Squirrel Measures The following measures shall be implemented during construction to reduce impacts on Mohave ground squirrel: • A qualified biological monitor shall be on site during ground disturbing activities. The name, qualifications, and phone number of the biological monitor shall be provided to a CDFW regional representative at least fourteen (14) days before ground disturbing activities. • To minimize impacts on Mohave ground squirrel habitat, vegetation removal shall be minimized and vehicle travel shall be confined to designated routes. Cross-country (off-road) vehicle travel shall be prohibited and signs shall be posted to this effect during project construction. If Mohave ground squirrel are encountered, drivers shall stop, wait for the individual(s) to move off the road, and immediately notify the biological monitor of the location where the individual was observed. • To avoid impacts to Mohave ground squirrel movements or dispersal, the existing Walker Creek Road Bridge shall remain in place and unobstructed to Mohave ground squirrel. • The approved biological monitor shall inspect all open holes and trenches within the project site at the beginning, middle, and end of each day for trapped animals. To prevent inadvertent entrapment of Mohave ground squirrel or any other animals, the biological monitor shall oversee the	All project areas	• All project personnel are trained on Mohave Ground Squirrel prior to working on the site • A qualified biological monitor is present during ground disturbing activities • Vegetation removal is minimized • Vehicle travel is confined to designated routes • The biological monitor inspects all open holes and trenches within the project site at the beginning, middle, and end of each day	• Inyo County Public Works Department • Construction contractor • CDFW

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to enter and become entrapped. Escape ramps shall be installed in holes greater than two feet deep that do not hold water or other material, to allow animals to escape. Before holes or trenches are filled, the biological monitor shall thoroughly inspect them for trapped animals. If any worker discovers that Mohave ground squirrel have become trapped, they shall halt project-related activities and notify the biological monitor immediately. Project workers and the biological monitor shall allow the Mohave ground squirrel to escape out of harm's way before allowing work to continue. The use of temporary fencing, around the perimeter of trenches or holes is an acceptable minimization measure. The biological monitor shall fully excavate by hand all burrows or scope each burrow within the project area that are suspected or known to be occupied by Mohave ground squirrel. The biologist shall allow the Mohave ground squirrel encountered in the excavated burrows during their active period to escape out of harm's way. During the dormant period (September – March), the biologist shall collect and immediately relocate the Mohave ground squirrel to an artificial burrow at a protected off-site location approved in advance by CDFW's regional representative. The covered species may only be relocated by the approved biological monitor. The approved biological monitor shall prepare relocation burrows in the following manner: (1) dig a hole of at least 2 feet deep; (2) install a 9-inch-diameter non-collapsible plastic container, which shall be connected to a 3-inch diameter, corrugated, non-collapsible pipe that runs to the ground surface at a 45-degree angle; (3) the biological monitor shall place the Mohave ground squirrel in the artificial burrow and lightly plug the burrow mouth with soil in a manner that is similar to a natural Mohave ground squirrel burrow.			

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
Prior to ground disturbing activities, all workers on the project site shall receive training on Mohave ground squirrel ecology, legal protections, and penalties for impacts to Mohave ground squirrel as part of the Worker Environmental Awareness Training (WEAT; refer to Mitigation Measure BIO-3)			
MITIGATION MEASURE BIO-7: American Badger and Desert Kit Fox Mitigation and Monitoring Plan No fewer than 60 days prior to the start of any pre-construction site mobilization, Inyo County shall provide CDFW with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan (plan) for approval. The final plan shall include, but is not limited to, the following procedures and impact avoidance measures: <i>Pre-Construction Measures</i> - A preconstruction survey for kit fox or American badger dens shall be conducted by a qualified biologist within 14 days prior to construction commencement. The survey shall include the entire project site and a 20-foot buffer around disturbed areas. If dens are detected each den shall be classified as inactive, potentially active, or definitely active. - Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. - Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. - If no tracks are observed in the tracking medium or no photos of the target species are captured after three consecutive nights, the den shall be excavated and backfilled by hand. - If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After	All project areas	- Vehicle speeds limits are maintained - All excavated, steep-walled holes or trenches more than 2-feet deep are covered at the close of each working day - All construction structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods are inspected before being used or moved - All food-related trash is disposed of in securely closed containers and removed from project site at least once a week - No firearms are allowed - Use of rodenticides and herbicides is restricted	- Inyo County Public Works Department - Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. - If an active natal den is detected on the site, the CDFW shall be contacted within 24 hours to determine the appropriate course of action to minimize the potential for harm or mortality. The course of action would depend on the age of the pups, location of the den on the site (e.g., is the den in a central area or in a perimeter location), status of the perimeter site fence (completed or not), and the pending construction activities proposed near the den. A no-disturbance buffer will be defined by the qualified biologist, which shall be maintained around active natal dens. <i>Construction Measures</i> - All vehicle and equipment shall observe a daytime speed limit of 15-mph. All vehicle and equipment shall observe a night-time speed limit of 10-mph. - To prevent inadvertent entrapment of badgers, kit foxes, or other animals during construction phase of the proposed project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, thorough inspections for trapped animals shall occur. If at any time a trapped or injured badger or kit fox is discovered, CDFW shall be contracted in writing within 24 hours. - All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for badger or kit fox before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a badger or kit fox is discovered inside a pipe, that section of pipe shall not be moved until CDFW has been consulted.			

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
• All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the construction or project site. • No firearms shall be allowed on the project site. • Use of rodenticides and herbicides on or adjacent to the project site shall be restricted. This is necessary to prevent primary or secondary poisoning of badgers or kit foxes and the depletion of prey populations on which they depend. All uses of rodenticides and herbicides should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation. If rodent control must be conducted, zinc phosphide shall be used because of a proven low risk to badger and kit fox. • A biological monitor shall be appointed by the County who will be the point of contact for any employee or contractor who might inadvertently kill or injure a badger or kit fox or who finds a dead, injured or entrapped badger or kit fox. The biological monitor shall be identified during the employee education program and their name and telephone number shall be provided to CDFW. • In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. <i>Distemper Measures</i> • The following measures are required to reduce the likelihood of distemper transmission: ◦ No pets shall be allowed on the site prior to or during construction, with the possible exception of kit fox scat detection dogs during preconstruction surveys, and then only with prior CDFW approval; ◦ Any kit fox hazing activities that include the use of animal repellents such as coyote urine must be cleared through CDFW prior to use; and			

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
Any documented kit fox mortality shall be reported to CDFW and within 24 hours of identification. If a dead kit fox is observed, it shall be retained and protected from scavengers until CDFW determines if the collection of necropsy samples is justified.			
MITIGATION MEASURE BIO-8: Special-Status Bats A preconstruction survey for Pallid bats shall be conducted by a qualified biologist within 14 days prior to construction commencement, and for any roosting bats underneath the existing bridge, if construction work is to occur between April and August. If roosting bats are observed: - Work activities shall not occur within 50 feet of the existing bridge. Travel over the bridge would still be permissible as roosts were likely established with baseline noise level from existing vehicle access. - Lights are not to be used under or in the vicinity of the existing bridge during the roosting season, between April and August. - Combustion equipment, such as generators, pumps, and vehicles, are not to be parked or engines started under the existing bridge or within 50 feet.	Within 50 feet of the existing bridge	- Bat avoidance measures are implemented - Do not use lights in the vicinity of the existing bridge during roosting season if roosting bats are observed	- Inyo County Public Works Department - Construction contractor
MITIGATION MEASURE BIO-9: Nesting Bird Measures - If project activities are scheduled to occur between February 1 and September 30, the County shall prepare a Nesting Bird Plan (NBP). The County shall provide CDFW with the opportunity to review and comment on the plan, by providing it no later than 30 days prior to the initiation of construction activities. The NBP will include project-specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with applicable laws related to nesting birds and birds of prey. The NBP shall at a minimum include: - Monitoring protocols	Within 500 feet of the all work areas	No-disturbance buffers are enforced	- Inyo County Public Works Department - Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
○ Survey timing and duration ○ The creation, maintenance, and submittal to CDFW of a bird-nesting log ○ Project-specific avoidance and minimization measures. Avoidance and minimization measures shall include, at a minimum: project phasing and timing, monitoring of project-related noise, sound walls and buffers. • A pre-construction survey for active bird nests shall be conducted in all vegetated areas to be impacted and within 500 feet of the work areas. • The nesting bird survey shall be conducted by a qualified biologist within 3 days prior to construction start. • If no nesting or breeding behavior is observed, construction may proceed. • If an active nest is detected, a determination shall be made by a qualified biologist as to whether construction work shall affect the active nest. If it is determined that construction shall not affect an active nest, work may proceed. • If it is determined that construction activities are likely to impair the successful rearing of the young, a 'no-disturbance buffer' in the form of orange mesh Environmentally Sensitive Area (ESA) fencing shall be established around occupied nests to prevent destruction of the nest and to prevent disruption of breeding or rearing behavior. • The extent of the 'no-disturbance buffer' shall be determined by a qualified biologist in consultation with CDFW and shall depend on the level of noise or disturbance, line of sight between the nest and the disturbance area, the type of bird, ambient levels of noise and other disturbances, and other topographic or artificial barriers. • 'No-disturbance buffers' shall be maintained until the end of the breeding season or until a qualified wildlife biologist has determined that the nestlings have fledged.			

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
If a nest is discovered by workers on the project site during daily inspections, work shall stop and the biologist shall be called to the site.			
MITIGATION MEASURE CUL-1: Cultural Resources Sensitivity Training and Inadvertent Discovery A professional archaeologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) prior to initiation of site preparation and/or construction, to alert construction workers to the possibility of exposing significant historic and/or prehistoric archaeological resources within the proposed project area. The training shall include a discussion of the types of prehistoric or historic objects that could be exposed and how to recognize them, the need to stop excavation at a discovery and within 50 feet of a discovery, and the procedures to follow regarding discovery protection and notification. An "Alert Sheet" shall be posted in staging areas, such as in construction trailers, to alert personnel to the procedures and protocols to follow for the discovery of a potentially significant historic and/or prehistoric archaeological resources.³ In the event that an archaeological resource is discovered, ground disturbing work shall be halted within 50 feet of the find,	N/A	- All project personnel receive training on cultural resources prior to working on the site "Alert Sheet" is posted in staging areas - Halt work and establish buffer around cultural resources if encountered	- Inyo County Public Works Department - Construction contractor - State Historic Preservation Office - Qualified archaeologist

³ Significant prehistoric cultural resources may include:

- f. Human bone, either isolated or intact burials.
- g. Habitation, occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
- h. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
- i. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
- j. Isolated prehistoric artifacts (Basin 2015).

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
and a qualified cultural resources specialist/archaeologist shall be brought to the site. The qualified cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area. If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within 50 feet of the find, and the qualified cultural resources specialist/archaeologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). If the resource is determined to be prehistoric, the evaluation and determination of appropriate measures shall be coordinated with regional Native American tribes. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources. If preservation-in-place and avoidance is not possible, data recovery shall be undertaken. The methods and results of data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by the County.			
MITIGATION MEASURE CUL-2: Paleontological Resources Sensitivity Training and Inadvertent Discovery A professional paleontologist shall provide sensitivity training to supervisory staff (County staff, biological monitor, and construction foreman) to alert construction workers to the possibility of exposing significant paleontological resources within the proposed project area. The training shall be conducted to recognize fossil materials in the event that any are uncovered during construction. In the event that a paleontological resource is uncovered during project implementation, all ground-disturbing work within a	N/A	• All project personnel receive training on paleontological resources prior to working on the site • Halt work and establish buffer around paleontological resources if encountered	• Inyo County Public Works Department • Construction contractor • Qualified paleontologist

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
50-foot radius shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts would occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether it is "unique" ⁴ under CEQA, Appendix G, part V. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with County staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation-in-place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources. If preservation-in-place is not feasible and avoidance is not possible, the fossils shall be recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and			

⁴ A unique paleontological resource is any fossil or assemblage of fossils, or paleontological resource site or formation that meets any one of the following criteria:

- Is the best example of its kind locally or regionally;
- Illustrates a paleontological or evolutionary principle (e.g. faunal succession; plant or animal relationships);
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data);
- Encompasses any part of a "type locality" of a fossil or formation;
- Contains a unique or particularly unusual assemblage of fossils;
- Occupies a unique position stratigraphically within a formation; or
- Occupies a unique position, proximally, distally or laterally within a formation's extent or distribution (County of San Diego, 2009).

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
permanent scientific institution according to Society of Vertebrate Paleontology (SVP) standard guidelines. Work may commence upon completion of treatment.			
MITIGATION MEASURE CUL-3: Human Remains If human remains are encountered during construction, ground disturbing work shall halt within 50 feet of any area where human remains or suspected human remains are encountered in compliance with California law (Health and Safety Code section 7050.5; PRC sections 5097.94, 5097.98, and 5097.99). The County shall contact the Medical Examiner at the county coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by the County. If the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall immediately notify the identified Most Likely Descendant (MLD), and the MLD has 48 hours from the time they are granted entry to the site to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 48 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC shall mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.	N/A	• All project personnel receive training on human remains discovery prior to working on the site • Halt work and establish buffer around human remains if encountered	• Inyo County Public Works Department • Construction contractor • Medical Examiner • NAHC
MM HAZ-1: Fire Prevention Procedures • Prior to ground disturbing activities, all workers on the project site shall be trained regarding the proper handling and/or storage of materials posing a fire hazard, potential ignition sources (such as cigarettes or sparking equipment), and appropriate types and use of fire protection equipment.	All project areas	• All project personnel receive training on fire prevention prior to working on the site • Fire prevention tools and water are maintained on site	• Inyo County Public Works Department • Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
• Fire suppression equipment, including fire extinguishers, water, and shovels, shall be available on-site at all times. • Vehicles shall not be parked in vegetated areas. • Smoking shall be allowed only in designated areas. The designated areas must be unvegetated. Cigarette butts shall be properly contained and transported off-site for disposal			

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Table E-3 Mitigation Measures - After Construction

Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
MITIGATION MEASURE BIO-1: Special-Status Plant Species A pre-construction botanical survey will be conducted for all special-status plant species with potential to occur in the project vicinity. A qualified biologist will conduct the survey during the blooming season (April – July) within one year of construction. If any special-status plant species are observed, the location of the population will be recorded and the following measures will be implemented: • Relocate construction staging areas and access roads as necessary to minimize direct impacts • Fence off areas of the population outside planned construction zones • Prior to ground disturbance in the areas where special-status plant species populations will be impacted by construction, scrape the top 2 inches of topsoil and stockpile it on site temporarily; after construction is complete, return it to areas outside the footprint of permanent infrastructure, making sure to spread it 0.8 to 2 inches deep and being careful to avoid compaction of the soil or other disturbance to soil and vegetation.	All project areas where suitable habitat for special-status plant species is present	• Spread stockpiled topsoil within project impact areas at a depth of 0.8 to 2 inches, avoiding permanent infrastructure	• Inyo County Public Works Department • Construction contractor
MITIGATION MEASURE BIO-4: Weed Control Measures The following weed control measures shall be implemented during and following construction of the proposed project to reduce the spread of non-native plant species in the project area: • All native seed mix applied to the site will be from a certified native weed-free seed source; • All fill materials used for project construction and erosion control will come from a certified weed-free source; • Tools, equipment, and vehicles will be cleaned of soil and plant material before entering and leaving the worksite; • Equipment will be washed prior to transportation to the project impact area; and	All project areas	• Planting seed mixes and any restoration plants don't not introduce invasive weeds species • Erosion control materials, straw, and mulch are weed-free	• Inyo County Public Works Department • Construction contractor

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Mitigation Measures	Applicable Location	Monitoring/Reporting Action	Responsible and Involved Parties
Equipment and vehicles will be inspected by the qualified biologist to ensure no weed material is transported to the project impact area.			

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