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United States Department of the Interior

NATIONAL PARK SERVICE PACIFIC WEST REGION 333 Bush Street, Suite 500 San Francisco, CA 94104-2828



IN REPLY REFER TO:

L7617 (PWRO-P)

MAY 2 8 2019

Memorandum

To:

Superintendent, Joshua Tree National Park

From:

Regional Director, Pacific West

Subject:

Environmental Compliance for Replacement of 12kV

Electrical Distribution Line

The Finding of No Significant Impact (FONSI) for issuance of a Right-of-Way for replacement of 5.2 miles of deteriorating electrical distribution line in the Park Boulevard area is approved.

To complete this particular conservation planning and environmental impact analysis effort, at the time when the park announces the decision, a copy of the FONSI should be made available to all individuals and organizations that received or commented on the supporting environmental assessment.

Thank you for staff efforts to include a project update in the May 26 - June 1 Weekly Report.

Stan Austin

Attachment

Joshua Tree National Park

California



Southern California Edison Utah 12 kV Relocation Project: Phase I and Phase II Finding of No Significant Impact

May 2019

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to select Alternative B, the proposed action, as analyzed in the SCE Utah 12 kV Relocation Project Environmental Assessment (EA). This FONSI documents the NPS determination that no significant impacts on the quality of the human environment will occur from implementation of this course of action.

The NPS will issue a right-of-way (ROW) permit to replace and relocate a buried 12 kilovolt (kV) distribution line in Joshua Tree National Park (JTNP). The existing buried distribution line was installed in the 1960s in a mostly natural landscape, not adjacent to any roads or other utility corridors. The line supplies power to several users, including JTNP, and to Belle Mountain where the Federal Aviation Administration (FAA), Riverside County (County) emergency services, and JTNP all maintain independent communication facilities. The existing line is deteriorating with age, creating maintenance problems for SCE and increasing the potential for future outages; consequently, it must be replaced. Because the existing line is in a natural area without road access, maintenance access is difficult. SCE is requesting permission to relocate the line from its existing alignment to one in the road shoulder of Park Boulevard. SCE will be responsible for the installation and future maintenance costs of the new line.

This FONSI, its appendices, and the EA constitute the record of the environmental impact analysis and decision-making process, as required by the National Environmental Policy Act (NEPA). The FONSI is available on the NPS Planning, Environment, and Public Comment (PEPC #69927) website at https://parkplanning.nps.gov/SCE_ROW_Cable.

Purpose and Need

The purpose of the ROW permit and associated special use permit (SUP), as presented by the applicant, is to enable operation and maintenance of a 12kV electrical distribution line to replace 5.2 miles of the line with a new electrical distribution line in a new location adjacent to Park Boulevard. The proposed action is necessary to provide a reliable power supply for park, FAA, and County operations. The existing power supply is old and deteriorating and has become unreliable, resulting in potential outages.

Selected Alternative

The NPS selects Alternative B as described in the EA for implementation. The NPS will grant an ROW permit and an SUP to SCE to construct the proposed action in two phases. NPS will monitor the work for quality control and to ensure that mitigation and resource protection measures are properly implemented at the correct time (Attachment A). Phase I will entail relocation of the existing line adjacent to Park Boulevard. Once the relocated line is in place, it will be tested, and then the circuit will be moved from the old line to the new line. Phase II will entail decommissioning the old line, cutting and capping both ends, abandoning the line buried in place, and removing aboveground components. Key elements of the selected action are summarized below.

Phase 1: Relocation of the Distribution Line

- Electrical components and structures
 - o Two precast concrete transformer pads—48 by 54 inches
 - o Conductor sized 1/0—approximately 5.21 miles
 - o 5-inch duct (PVC)—approximately 5.21 miles
 - o Approximately 29 precast pull boxes—each 2 by 3 by 3 feet
- Trenching and pull box installation: SCE will dig a trench immediately adjacent to Park Boulevard (generally within 2 feet of the edge of pavement) and install conduit to house the electrical line with a minimum of 30 inches of cover. Open trenches will be refilled or covered with plates at the close of each day. Excavated soils will be used for backfilling after the installation of project components. Approximately 2 acres of disturbance may be necessary for the trenching and box installation. Of the total area of disturbance, 1.8 acres will be within previously disturbed road shoulder areas and 0.2 acre will be in areas where there is little to no road shoulder, necessitating some vegetation disturbance. Pull boxes will be placed at semi-regular intervals to allow access to the conduit both for installation of the electrical line and for future maintenance access. Each pull box will require an excavation of approximately 4 by 5 feet and 4–5 feet deep. The area around the boxes will be backfilled and the pull boxes placed flush with the surface.
- Horizontal directional drilling (HDD): HDD will be used at four wash locations (low-water crossings) where buried rock gabions (placed by park staff for road stabilization) would make trenching difficult. Additionally, SCE will install conduit under Park Boulevard and Pinto Basin Road using HDD to minimize impacts on the roadway.
- **Conductor installation:** Following installation of the conduit and pull boxes using trenching and HDD, SCE will install the conductor within the conduit using the pull boxes as access points. Generally, light trucks and a small group of workers are required to complete conductor installation.
- Traffic control and access: Access to the project site will be from Park Boulevard and Pinto
 Basin Road. During trenching and HDD activities, SCE will implement traffic controls. Depending
 on the length of the work zone and line of sight, flaggers or a pilot car may be used to facilitate
 traffic passage. One lane of traffic will remain open at all times. Traffic controls will be
 coordinated with JTNP to minimize disruption to visitors to the extent possible.

- Staging area: An existing staging area near the park's maintenance facility will be used during construction to store equipment and materials. No other staging or equipment storage will be necessary. Tortoise exclusion fencing will be installed around the staging area to prevent tortoises entering the area during construction.
- **Operations and maintenance:** SCE will operate the new distribution line for the duration of the ROW permit term. Maintenance of the line will involve inspection and maintenance, cable testing and replacement, and emergency repairs as needed.
 - Routine inspection and maintenance: semiannual inspections of each vault for its structural integrity would entail at least two 2-man underground crews using van trucks. Each inspection may require temporary lane closures at the vault location for the safety of the inspection crew. Inspections will be scheduled to avoid peak visitor seasons. The inspections could result in the replacement of vault lids, structural shoring, or the replacement of the entire vault (within the footprint of the existing vault).
 - o Routine cable testing and replacement: SCE will conduct routine semiannual inspections and testing of the underground cable and its components throughout the project's 30-year lifespan. Staffing and traffic management would be the same as those for routine inspection and maintenance. Sections of cable may need to be replaced from time to time, requiring the use of support trucks, line trucks, and cable trailers. At the end of the cable's 30-year operational lifespan, SCE will need to replace the entire cable run.
 - o Emergency repairs: In the event of a cable failure event, SCE will attempt to pull the failed cable from the nearest vault location and replace it. SCE will attempt to pull the cable first from each vault on each side of the faulted cable. Depending on the severity of the fault, the cable may not be able to be pulled back and replaced, at which time the fault location will need to be identified using testing equipment. The duct bank would be dug up and exposed, the encasement would be chipped away, and conduit would be cut, exposing the cable. The cable would then be cut and either spliced or pulled back and replaced.

Phase II: Decommissioning the Existing Line

After the new underground line is installed and energized, the existing 5 miles of direct-buried oil-coated conductor will be decommissioned and abandoned in place. The decommissioning work will include de-energizing the line, cutting and capping both ends, and removing the aboveground portions of approximately 11 pull boxes as well as any line markers. Each of the existing pull boxes is approximately 3 by 5 feet with concrete walls and a metal lid, flush or slightly below the surface. The box lids would be removed and recycled and concrete in the boxes will be broken up and used as fill. Native soil from the immediate area will be raked over the area using hand tools to a depth of at least 12 inches. Work for Phase II will be completed by crews on foot and using hand tools.

Other Alternatives Considered in the EA

Under Alternative A, the No-Action Alternative, NPS would not issue an ROW permit or an SUP to SCE to relocate the existing Utah 12 kV distribution line. SCE would not be authorized to continue to operate the existing line, providing power to Belle Mountain where the FAA, County emergency services, and JTNP all maintain independent communication facilities. No change to SCE's existing

operations plan would occur, and SCE would continue to repair and maintain the existing line. Over time, it is likely that failure of the existing line would necessitate actions in the future.

The alternatives described below were considered but dismissed from full analysis in the EA.

- Remove Existing Line and Bury New Line in the Same Footprint: NPS considered an
 alternative that would remove the existing line and replace it with a new line constructed with
 modern materials. This alternative was dismissed from further consideration because it would
 cause an unacceptable amount of disturbance and also would not be consistent with NPS
 guidelines that direct parks to co-locate roads and utilities within the same corridor.
- Remove Existing Line and Relocate New Line to Adjacent to Park Boulevard: NPS considered an alternative that would require removal of the entire existing line along with relocation to adjacent to Park Boulevard. Park staff considered the materials in the existing cable and estimated the amount of disturbance that would be required to remove the existing line. The staff determined that materials in the existing cable would not pose a long-term contamination risk, and that removal of the existing line would cause an unacceptable amount of disturbance. Accordingly, this alternative was dismissed from further consideration.
- Abandon Existing Line in Place and Construct Renewable Energy Source: NPS considered a renewable energy alternative that would entail abandoning the existing line in place, terminating the ROW agreement with SCE, and supplying power to the end users using a solar photovoltaic source (i.e., solar panels). The energy required under this alternative was determined be approximately 612 kilowatt hours per month on average, requiring approximately 25 solar panels. Because SCE has no mandate or requirement to provide solar panels to each of the end users, each user would have to agree to install panels. Park staff investigated several locations, both on rooftops and on the ground, for a solar installation of this size and concluded that an installation would be feasible in several locations; however, this alternative was ultimately dismissed because a backup connection to the grid would still be needed to provide backup power to FAA, JTNP, and County facilities, necessitating a new line and ROW agreement. Accordingly, this alternative was determined to be infeasible and was dismissed from further consideration.

Decision Reached and Rationale

The NPS has selected Alternative B, Proposed Action, involving issuance of an ROW permit and an SUP to SCE for relocation of the Utah 12 kV distribution line to an alignment along Park Boulevard. The NPS has determined that provision of a reliable power supply for JTNP, FAA, and County operations outweighs the temporary impacts—slight traffic delays and short-term visual disturbance—associated with construction of the relocated power line.

The project design effectively mitigates short-term adverse effects on natural resources, visitor experience, and cultural resources through an array of resource protection measures and best management practices (BMPs) (Attachment A). Disturbance of natural habitat, all in close proximity to the roadway, will be limited to 0.2 acre. BMPs addressing fugitive dust emissions, erosion potential, and management of hazardous materials will be implemented. Disturbed areas will be revegetated upon completion of construction. Measures will be implemented to minimize the introduction and spread of invasive plant species. Specific tortoise protection measures will be implemented and enforced. Preconstruction surveys will be conducted to identify nesting birds in or

near the disturbance area. Work will be scheduled and traffic interruptions to minimize visitor exposure. Measures will be implemented to minimize construction-related noise. Public announcements will be issued to advise park visitors and area residents about temporary temporary inconveniences from construction work in the roadway or involving the California Running and Hiking Trail (CRHT). Measures to protect cultural resources and landscapes will be in place to protect cultural resources inadvertently discovered during ground-disturbing activities.

The NPS has determined that the action will not cause conflict with the park's mission. Moreover, the existing distribution line is in an undeveloped landscape, and because it is increasingly likely to fail, efforts to maintain or replace it in its current location would result in more severe disturbance of park resources than the proposed action.

Why the Selected Alternative Will Not Have a Significant Effect on the Human Environment

As defined in 40 Code of Federal Regulations 1508.27, significance is determined by examining the following criteria:

- 1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.
 - Implementation of the selected action will result in both beneficial and adverse impacts, none of which the NPS has found to be significant. Construction-related activities may have short-term, localized adverse effects on resources; however, the effects will be mitigated through design, scheduling, and resource protection measures. The long-term physical impacts on natural and built resources are negligible and will be less than those associated with maintaining or replacing the distribution line in its current location.
- 2. The degree to which the selected action affects public health or safety.
 - The project is expected to have minimal, short-term adverse effects on public health or safety, associated primarily with traffic delays. However, safety measures in the form of traffic management will minimize or prevent risk to the public from construction-related activities.
- 3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
 - No prime farmlands, wetlands, or wild and scenic rivers are present in the project area. No archaeological resources have been identified in the area of disturbance, and protective measures will be in place in the event that any are inadvertently encountered during ground-disturbing activities. The single cultural resource—the CRHT—will be subject to negligible and short-term disturbance, which will be restored upon completion. Although the project passes through habitat for sensitive species (e.g., desert tortoise, Joshua trees), resource protection measures will be in place to minimize impacts on these resources.
- 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
 - No public scoping was conducted, and no comments were received following publication of the EA. Accordingly, there is no evidence of any controversial issues surrounding the proposed action.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
 - The anticipated effects of installing a power distribution line along a roadway are not highly uncertain or unique, nor do they entail any unknown risks. Resource conditions in the project area are well known, and the physical impacts associated with implementing the selected action along Park Boulevard in JTNP are understood.
- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
 - The decision to issue an ROW permit and an SUP to SCE for relocation of the Utah distribution line does not establish a precedent for future actions because any such actions would require separate consideration and environmental review.
- 7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
 - The EA concluded that past, present, and future activities in conjunction with the selected action could have moderate cumulative impacts on some resources. However, because of the temporary and localized character of these impacts—both of the proposed action and other activities—none of these impacts would be considered cumulatively significant.
- 8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
 - The relocated distribution line will be installed primarily along the shoulder of Park Boulevard. Pedestrian surveys identified no NRHP-eligible sites, and the CRHT would be subject to a single, temporary trench at one roadside location. Consequently, the action's adverse effects on cultural resources will be negligible.
- 9. The degree to which the action may adversely affect an endangered or threatened species or its habitat.
 - The selected action would temporarily disturb 0.2 acre of habitat suitable to support several special-status species. However, in view of its location along a regularly traveled roadway, the disturbance area provides low-quality habitat, and multiple resource protection measures will minimize the risk of adverse effects on individuals. The selected action will not restrict any of the special-status species' distribution or significantly reduce their numbers in the park, and the potential effects will be negligible.
- 10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.
 - The selected action does not violate any Federal, State, or local environmental protection laws.

Public Involvement

No public scoping occurred for this project. SCE provides power to the Federal Aviation Administration's communication link, the Riverside County Public Emergency Radio System repeater, and the park's own radio repeater; this service is required. Renewable energy is not reliable enough to support these functions.

To inform the public of the availability of the EA, NPS issued press releases and placed an ad in the local newspaper on March 14th and March 21st, 2019. Copies of the EA were made available to interested individuals upon request. Copies of the document were also available for review at the Oasis of Mara Visitor Center, Joshua Tree Visitor Center, and on NPS planning website.

The EA was subject to a 30-day public comment period from March 15 to April 13, 2019. No public comments were received.

Agency and Tribal Consultation

California State Historic Preservation Officer

In accordance with Section 106 of the NHPA, JTNP staff consulted with the State Historic Preservation Officer (SHPO). The park contacted the SHPO on May 3, 2018, to seek concurrence of our finding of no adverse effect on historic properties, archaeological resources, and cultural landscapes under the proposed action. The park received concurrence from SHPO on July 13, 2018.

U.S. Fish and Wildlife Service

In accordance with the Endangered Species Act, JTNP requested concurrence with USFWS on April 23, 2018, regarding our conclusion that the proposed action was not likely to adversely affect federally listed species. The USFWS responded on August 20, 2018, concurring that the selected action, with implementation of the conservation measures, is not likely to incidentally take or otherwise adversely affect desert tortoise.

Native American Consultation

The Park contacted the 15 traditionally associated American Indian tribes on July 22, 2015. The tribes did not identify or have knowledge of ethnographic resources or other potential historic properties, nor did they express other concerns within the project area. The Park received requests from the Agua Caliente Band of Mission Indians and the Morongo Band of Mission Indians that one or more tribal monitors be present during ground-disturbing activities during construction of the proposed project. The park has informed SCE of this request and both the park and SCE will accommodate these requests. The park will continue to consult with all traditionally associated tribal communities throughout both phases of project implementation.

Conclusion

Based on the planning and environmental impact analysis documented in the EA; with due consideration of consultations with other agencies; and given the efficacy of the resource protection measures, construction BMPs, and design constraints to avoid, reduce, or eliminate impacts, the NPS has determined that the selected alternative does not constitute a federal action that normally requires preparation of an EIS. Adverse environmental impacts that could occur are localized and limited in context. The selected alternative will not have significant effect on the quality of the human environment or the park's cultural or natural resources.

There are no unmitigated adverse impacts on public safety, sites or districts listed in or eligible to be listed in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS will not be prepared and the selected alternative may be implemented as soon as practicable.

Recommended:

David Smith

Superintendent

Joshua Tree National Park

Approved:

Stan Austin

Regional Director Pacific West Region

Date

5.28.19

Date

Joshua Tree National Park

California



Attachment A

Best Management Practices and Resource Protection Measures

To prevent and minimize potential adverse impacts associated with the project, best management practices (BMPs) and mitigation measures will be implemented during the design, approval, construction, and post-construction phases.

Measure	Responsibility
General Measures	
The NPS project manager will ensure that the project construction remains confined within the parameters established in the compliance documents and that mitigation measures are properly implemented.	NPS project manager
All protection measures will be clearly stated in the construction specifications. Workers will be instructed to avoid conducting activities beyond the construction zone, as defined by the construction zone fencing. This does not include necessary temporary structures such as erosion control fencing, which may be most effective when installed outside the construction zone.	NPS project manager, SCE
All tools, equipment, barricades, fencing, signs, and surplus materials will be removed from the work area upon completion. Construction debris will be hauled from the park to an appropriate disposal location. Any asphalt surfaces damaged due to work on the project will be repaired to original condition. All demolition debris will be removed from the project site, including all visible concrete and metal pieces.	SCE, NPS project manager
Contractors will be required to properly maintain construction equipment (e.g., mufflers to minimize noise).	SCE, NPS project manager
A hazardous spill plan will be in place, stating what actions will be taken in the event of a spill and describing preventive measures to be implemented, such as placement of refueling facilities, storage, and handling of hazardous materials.	SCE, NPS project manager
All equipment on the project site will be maintained in a clean and well- functioning condition to avoid or minimize contamination from mechanical fluids. All equipment will be checked daily.	SCE, NPS project manager
Material stockpiling, machinery storage, and vehicle parking will be permitted only in designated areas.	SCE, NPS project manager
Traffic delays that result from construction activities will be limited to a 30-minute maximum in one direction through the project area.	SCE, NPS project manager
No lane closures will occur on the weekends from Friday 6:00 p.m. through Monday 6:00 a.m. No work will occur on recognized federal holidays.	SCE, NPS project manager
Work hours will be from dawn to dusk to avoid the increased potential for accidents after dark.	SCE, NPS project manager

Measure	Responsibility
Week-day lane closures using one-way traffic with pilot cars and/or flaggers and 30-minute maximum delays will allow the work to continue with minimal traffic safety concerns.	SCE, NPS project manager
Any project-related vehicle or equipment operating on unpaved roads will not exceed a speed limit of 25 miles per hour.	SCE, NPS project manager
Cross-country (off-road) travel will not be authorized, except under life-threatening or emergency situations.	SCE, NPS project manager
Air Quality Measures	
Construction activities will be coupled with water sprinkling to reduce fugitive dust emissions. Water sprinkling will be conducted as necessary on active work areas where soil or fine particles are exposed.	SCE, NPS project manager
Idling of construction vehicles will be limited to reduce construction equipment emissions. Unnecessary idling of all construction vehicles will be avoided throughout the construction period.	SCE, NPS project manager
JTNP will prepare and implement a SWPPP to address all construction-related activities, equipment, and materials that have the potential to affect water quality during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs—such as sediment control, erosion control, construction materials, and waste management—to control the pollutants, as well as other non-stormwater BMPs. All construction site BMPs must be designed to control and minimize the effects of construction and construction-related activities, material, and pollutants on the watershed.	NPS project manager SCE
Soils Measures	
BMPs for drainage and sediment control, as identified and used by NPS, will be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. Use of BMPs in the project area for drainage protection will include all or some of the following actions, depending on site-specific requirements. • Keep disturbed areas as small as practical to minimize exposed soil and the potential for erosion.	SCE, NPS project manager
 Locate waste and excess excavated materials outside drainages to avoid sedimentation. 	

- Install silt fences, temporary earthen berms, temporary water bars, sediment traps, stone check dams, or other equivalent measures (including installing erosion-control measures around the perimeter of stockpiled fill material) prior to construction.
- Conduct regular site inspections during the construction period to ensure that erosion control measures were properly installed and are functioning effectively.
- Store, use, and dispose of chemicals, fuels, and other toxic materials in an appropriate manner.
- In areas of native soil and native vegetation removal (areas without a road shoulder), the top 15 centimeters of soil will be salvaged before trenching, stored separately, and replaced once activities are complete.
- Revegetate disturbed areas as soon as possible after construction is completed.

Measure	Responsibility
Noise Measures	
The following measures will be employed to reduce noise from construction activity.	SCE, NPS project manager
 Require all motor vehicles and equipment to have mufflers conforming to original manufacturer specifications that are in good working order and are in constant operation to prevent excessive or unusual noise. 	
• Limit idling of construction vehicle engines to the minimum amount of time necessary to complete the work.	
• Prohibit the use of unmuffled compression brakes inside park boundaries.	
 Prohibit the use of air horns inside park boundaries except for safety or emergencies. 	
Prohibit work on weekends/holidays during high visitation.	
Vegetation Measures	
Removal of Joshua trees and other succulents will not be permitted without prior approval. In the event removal will be necessary, Joshua trees and other succulents will be salvaged and replanted within the zone of disturbance.	NPS project manager, SCE, biologist
To prevent the introduction of and minimize the spread of nonnative vegetation and noxious weeds, the following measures will be implemented during construction. • Soil disturbance will be minimized to the extent possible.	NPS project manager, SCE, biologist
 In areas of native soil and native vegetation removal (areas without a road shoulder), the top 15 centimeters of soil will be salvaged before trenching, stored separately, and replaced once activities are complete. 	
 All construction equipment will be pressure washed or steam cleaned before entering the park to ensure that all equipment, machinery, rocks, gravel, and other materials are clean and weed free. 	
 Fill material from outside the park will not be used without prior approval. Any necessary fill, rock, or additional topsoil will be obtained from stockpiles from previous projects or excess material from this project, if possible; if not possible, then weed-free fill, rock, or additional topsoil will be obtained from sources outside the park. NPS personnel will certify that the source is weed free. 	
• Vehicle and equipment parking will be limited to within construction limits or within the approved staging area.	
 Monitoring and follow-up treatment of nonnative vegetation will be conducted after project activities are completed. 	
Individual shrubs removed during construction will be planted (i.e., installed in the soil) following construction to serve as <i>vertical mulch</i> (placement of materials upright in the soil as a beneficial erosion control measure and to facilitate the establishment of new vegetation).	NPS project manager, SCE, biologist
Plants overhanging into the construction zone will be pruned back rather than fully removed using the park vegetation management pruning guidelines.	NPS project manager, SCE,

Measure Responsibility Special-Status Species Measures An individual will be designated as the field contact representative (FCR) to FCR, NPS project oversee project compliance and coordination. The FCR will be either the manager qualified biologist or a desert tortoise monitor approved by the qualified biologist. The FCR will coordinate with USFWS and will be authorized to halt any activity that may endanger a desert tortoise. The FCR will be present during all monitoring/survey efforts and construction activities that may affect desert tortoises or desert tortoise habitat. Any incident occurring during project activities that is considered by the qualified biologist to be in noncompliance with the avoidance and minimization measures will be documented immediately by the qualified biologist and reported to the FCR, who will ensure that appropriate corrective action is taken. Corrective actions will be documented by the FCR. Prior to the onset of construction activities, the FCR will present a desert FCR, NPS project tortoise education program to all personnel who will be present on the work manager areas. Following the onset of construction, any new employee will be required to formally complete the tortoise education program prior to working onsite. At a minimum, the tortoise education program will cover the following topics. • A detailed description of the desert tortoise, including color photographs. • The distribution and general behavior of the desert tortoise. · Sensitivity of the species to human activities. • The protection the desert tortoise receives under the ESA, including prohibitions and penalties incurred for violation of the ESA. The protective measures being implemented to conserve the desert tortoise during construction activities. Procedures and a point of contact if a desert tortoise is observed onsite. No pets or firearms will be allowed within the project area at any time. NPS project manager, SCE FCR, NPS project All trash and food items generated by construction activities will be promptly contained in raven- and coyote-proof containers provided by the contractor. manager, SCE To avoid attracting wildlife (such as ravens and coyotes) into the construction zone, containers will be transported daily from park lands for appropriate disposal. The FCR will be responsible for ensuring that trash is removed regularly from the site such that containers do not overflow, and that the trash containers are kept securely closed when not in use.

Construction workers will be instructed to dispose properly of food scraps

and not to feed or approach wildlife.

Measure	Responsibility
 Vehicle use will adhere to the following. Speed Limits. Any project-related vehicle or equipment will not exceed a speed limit of 25 miles per hour. Workers will be made aware of this limit. Off-road travel. Off-road, cross-country travel will not be authorized, except in life-threatening or emergency situations. Tortoises under vehicles. Vehicles parked in the construction area will be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, the vehicle will not be moved until the desert tortoise leaves of its own accord. Tortoises on roads. If a tortoise is observed on or near the road, vehicular traffic will stop and the tortoise will be allowed to move off the road on its own, unless it will be moved regardless of construction activities in accordance with the park's permit for handling in association with research activities under Section 10(a)(a)(A) of the ESA. 	FCR, NPS project manager, SCE
No handling of desert tortoise or burrow excavation is allowed as part of the proposed action. If a tortoise is observed, construction will stop and tortoise will be allowed to move out of the area on its own. The FCR will maintain a complete record of all encounters with desert tortoise or its sign. The record will include location, date, time, life stage, general condition, identification numbers, and action taken. Within 90 days following the completion of the project, a report of all sightings and related FCR actions will be submitted to USFWS.	FCR, NPS project manager
Clearance surveys will be conducted within 1 week prior to commencement of any construction activities. All potential desert tortoise burrows within 100 feet of construction or staging activities will be examined for occupancy. Any inactive burrow found within 5 feet of the proposed construction limit will be clearly fenced and construction crew members instructed on how to minimize disturbance to it. At the end of construction activities, all materials used to identify tortoise burrows will be promptly removed. If an active burrow is found within 5 feet of the proposed construction limit, all construction activities within 50 feet in any direction of that burrow will stop immediately, and USFWS will be contacted for direction on how to proceed.	FCR, NPS project manager
Preconstruction surveys for nesting birds will be conducted during the nesting season (February 1 to August 31 and as early as January 1 for raptors). Preconstruction nesting bird surveys will be conducted by a qualified avian biologist prior to the initiation of construction. Nesting bird surveys will be conducted within 7 days prior to construction. Appropriate no-activity buffers will be established by a qualified biologist around active nests (generally 250 feet for passerines and 500 feet for most raptors) until it has been determined by a qualified biologist that the young have fledged or the nest has failed.	FCR/wildlife biologist, NPS project manager
Recreation Measures	
Visitors and bus drivers will be advised in park announcements, programs, and publications that there will be temporary inconveniences from construction work on the road.	NPS project manager
In all cases, traffic control and safety will be maintained.	NPS project manager, SCE
The construction contractor will include proposed daytime work protocols in its Safety Plan to show how traffic monitoring and controls will be implemented.	SCE, NPS project manager

Measure	Responsibility
The area of disturbance will be minimized to the greatest extent to minimize the likelihood of devegetated road edges becoming unsafe parking areas for park visitors.	SCE, NPS project manager
Cultural Resource Measures	
The historic period refuse scatter within the project area and associated with the NRHP-eligible Anaconda Mine site will be avoided during construction through staking and flagging around the artifact scatter so that construction personnel and equipment do not disturb the artifacts. Staking and flagging will be removed after construction is completed.	NPS project manager, cultural resources monitor, SCE
If any buried cultural resources are inadvertently discovered during project-related ground disturbance, work will be temporarily halted within 100 feet of the discovery. The site will be secured and park personnel will be consulted according to 36 CFR 800.13 and 43 CFR 10.	NPS project manager, cultural resources monitor, SCE
If human remains are inadvertently discovered during project construction, the employee in charge will immediately notify JTNP cultural resources staff by telephone and provide written confirmation of the discovery to JTNP. Work will cease in the area of the discovery and all reasonable efforts will be made to protect the remains and any other cultural items associated with the human remains. Work will not resume until JTNP provides notification that work may proceed.	NPS project manager, cultural resources monitor, SCE
If an inadvertent discovery of human remains or funerary or sacred objects occurs during construction, work will be halted immediately. In compliance with the Native American Graves Protection and Repatriation Act of 1990, NPS will notify and consult concerned American Indian Tribal representatives for the proper treatment of any remains and potentially associated cultural materials discovered.	NPS project manager, cultural resources monitor, SCE
Park Management Measures	
To the extent possible, and to guide HDD operations, the construction contractor will locate buried traffic counters, utilities, gabions, K rail, or boulders at low-water crossings along Park Boulevard prior to construction by consulting with park maintenance staff or potholing to determine the locations of these structures.	SCE, NPS project manager
The area of disturbance will be minimized to the greatest extent to minimize the likelihood of devegetated road edges becoming de facto parking for park visitors.	NPS project manager, SCE