

FINDING OF NO SIGNIFICANT IMPACT

**Reconstruction of Bonnie Clare Road,
Milepost 0.0 to Milepost 7.7;
Reconstruction of Grapevine Ranger Station Parking Lot and
Sidewalks; and
Resurfacing Mesquite Spring Campground Road
Milepost 0.0 to Milepost 1.9
Death Valley National Park
National Park Service
September 2012**

The National Park Service (NPS), in cooperation with the Federal Highway Administration (FHWA), is proposing to reconstruct and resurface the 7.7-mile segment of Bonnie Clare Road through Grapevine Canyon, from the Death Valley National Park boundary at the California/Nevada state line to the junction of Ubehebe Crater Road and approximately 100 feet past the Grapevine Ranger Station to tie in with the recently completed rehabilitation of Bonnie Clare Road from milepost 7.7 to milepost 40.0, and Ubehebe Road from milepost 0.0 to milepost 6.2. The National Park Service also proposes to formalize and pave the turnout at the park boundary entrance sign near the California/Nevada state line, resurface and make accessibility improvements to the parking lot and sidewalks at Grapevine Ranger Station, and resurface the 1.9-mile Mesquite Spring Campground Road.

PURPOSE AND NEED

The purpose of the proposed action is to provide a safe driving surface for park visitors, enhance visitor experience, and protect the government investment while adhering to the management philosophy for park roads as outlined in the *Death Valley National Park 2000 General Management Plan*.

The road reconstruction and resurfacing is needed to address extensive deterioration of road surfaces and areas of the road surface containing ruts and pavement cracks, and to improve visitor and employee safety.

This action is needed because:

- The existing pavement on Bonnie Clare Road and Mesquite Spring Campground Road is in poor condition and pavement edges are deteriorating.
- Drainage control issues exist for portions of the roadways, resulting in periodic flooding and maintenance issues.
- The existing paved width on Bonnie Clare Road is typically 20 feet to 22 feet wide, with sections as narrow as 17 feet, making these sections insufficient for the volume and type of traffic using this road.
- Narrow travel lanes on Bonnie Clare Road force large vehicles to drive over the center line or off the pavement, particularly when passing another large vehicle.

- As vehicles move from the gravel shoulder back to the paved roadway on Bonnie Clare Road, gravel is pulled onto the road creating a hazard for vehicles, especially motorcycles.
- Sight distances on Bonnie Clare Road are fair to poor in places where there are sharp curves and rocks or vegetation close to the roadway.
- The Grapevine Ranger Station parking lot and sidewalks do not have adequate parking and ramps to accommodate people with disabilities.

SELECTED ACTION

The selected action is alternative B (presented as the “preferred alternative” in the environmental assessment) with modifications incorporated as detailed below. These project revisions result from consultations completed with the California state historic preservation office (SHPO), the U.S. Fish and Wildlife Service (USFWS), and the Federal Highway Administration, and do not affect the overall impacts analysis.

Approximately 65% of the historic fence adjacent to the road would be removed and reconstructed outside the “clear recovery zone,” which is an area defined by the Federal Highway Administration as 7 feet from the edge of travel lanes.

For a short distance between mileposts 4.5 and 4.7 near the entrance to Scotty’s Castle, the proposed paved width of the road would be reduced to 20 feet. Approximately 4 feet of the 69 feet of historic entrance road between Bonnie Clare Road and the historic entrance gate at Scotty’s Castle (milepost 4.6) would be paved and would become part of the roadway.

Approximately 16,650 cubic yards of excavation and 25,200 tons of aggregate base would be required for this project. If imported borrow material is needed, the contractor would secure a borrow pit source that meets all of the requirements identified in the construction contract, including that the source be weed-free and pre-approved by the NPS botanist at Death Valley National Park.

The project is scheduled to begin February 1, and a survey strategy will be implemented beginning April 10 to avoid impacts to the least Bell’s vireo and southwestern willow flycatcher, as detailed in the mitigation table in this document.

GENERAL DESCRIPTION OF THE WORK

The selected alternative includes removal of the existing asphalt and placement of a new aggregate base course and new hot asphalt concrete pavement along Bonnie Clare Road from milepost 0.0 to milepost 7.7. The proposed paved width will be 22 feet 0 inches, except in one location. The proposed design speed will be 35 miles per hour (mph), except where noted in the following discussion. The overall area of the proposed project is approximately 46.7 acres (7.7 miles by 50 feet wide). The proposed road alignment will use the existing alignment of the straight road segments and will be modified at many of the curves to provide the needed lane width and radius for buses and large recreational vehicles to remain in one lane while traveling through the curves. The roadway vertical profile will remain unchanged for the majority of the project length in order to maintain the historic character of Bonnie Clare Road.

Rock wall and slope cuts will be avoided to the extent possible; new cuts will be implemented so that the resulting new rock and slope faces will be similar in angle and appearance to that of the existing steep, rough, volcanic and limestone rock that is characteristic of the rock walls and slopes. Slope cuts will be angled more steeply adjacent to archeological resources in order to avoid direct effects to those sites.

Narrow paved ditches designed to limit slope cuts will be constructed to avoid using wide, shallow drainage ditches (preserving the narrowness of the historic road corridor). Paved ditches will require curbing to keep the pavement edge from deteriorating as a result of major storm events and vehicular traffic. Installation of curbing will be minimized to reduce impacts to the historic character of Bonnie Clare Road. Tinted concrete curbing will be used to lessen the visual intrusion of the curb in relation to the road surface.

The selected alternative will include resurfacing the existing asphalt parking lot east of Grapevine Ranger Station and replacing the existing sidewalks, ramps, curbs, and gutters around the perimeter of the parking lot. The new parking lot surface and sidewalks will be re-graded to a maximum 5% slope (longitudinal) to meet Americans with Disabilities Act of 1990, as amended (ADA) / Architectural Barriers Act of 1968 (ABA) requirements along the accessible route and where possible, within the parking lot surface. The end of the parking lot and sidewalk will be raised by about 2 feet to minimize the overall steepness. The end of the ramp at the building wall will be raised between 2 and 4 inches to meet ADA/ABA requirements.

GENERAL CONSTRUCTION SCHEDULE

The duration of construction activity on Bonnie Clare Road will be approximately nine months to one year and is scheduled to begin in February 2013 (contingent on the availability of funding). Mesquite Spring Campground will be closed during road rehabilitation, which is estimated to be up to two months. Construction on the proposed project will occur in areas adjacent to suitable habitat for least Bell's vireo and southwestern willow flycatcher between February and April of 2013. Beginning April 10, 2013, all construction activities will cease in areas within a 0.25-mile buffer of suitable habitat; a qualified biologist will conduct surveys for these two species. This strategy is based on the most recent USFWS survey guidelines and protocols for the least Bell's vireo and southwestern willow flycatcher. If neither species is detected during surveys, then construction activities would resume in areas adjacent to suitable habitat on June 20. However, if either species is detected, and surveys confirm that birds are nesting or nesting is a possible outcome, then the National Park Service would resume construction activities adjacent to suitable habitat after: (1) the avian nesting and breeding season ends (i.e., August 16), or (2) it has been determined by a qualified biologist that the birds are not attempting to nest again or any young have fledged.

OTHER ALTERNATIVES CONSIDERED

One alternative was considered in detail in the environmental assessment—alternative A: the no-action alternative.

Alternative A (the no-action alternative) entails the continuation of existing conditions for Bonnie Clare Road. Had the no-action alternative been selected, the National Park Service would have responded to future needs and conditions associated with Bonnie Clare Road in Death Valley National Park without major actions or changes in the present course.

The existing posted speed for the majority of the road is 35 mph; through the historic district the speed limit is posted at 35 mph. Curve warning signs are posted throughout the corridor and speed advisories of 25 mph, 20 mph, and 15 mph are assigned, depending on severity of the curves. The existing paved roadway is 17 feet to 20 feet wide with deteriorating pavement edges, which in some places further reduces the width of the lanes. Shoulder drop-offs have been created leaving depressions and holes where vehicles have left the pavement. Most horizontal curves have little super elevation (the rise at the outside of a curve to keep the vehicle on the roadway) and insufficient run-out lengths (length along a roadway needed to transition between sections) with normal crown and with no or adverse crowns (super elevations). Sharp horizontal curves, combined with minimal vertical curve length, steep to vertical rock-cut slopes, a willow tree on the shoulder at approximate milepost 3.98, and a large cottonwood tree near the shoulder at Cottonwood Corner result in insufficient sight distance. The boundary entrance sign parking area is not paved and formalized.

Mesquite Spring Campground Road is 1.9 miles in length and 20 feet wide. The pavement is cracking and in poor condition. The Grapevine Ranger Station parking lot is approximately 200 feet by 60 feet plus entrance roads. The parking lot currently does not meet ADA/ABA accessibility standards.

The no-action alternative does not preclude short-term minor repair or improvement activities for the roads and parking lots or minor ADA/ABA improvements, which is part of routine maintenance for continuing operation and safety.

RATIONALE FOR SELECTED ALTERNATIVE

Based on the environmental analysis documented in the environmental assessment, and with due consideration for public and agency comments during scoping and during the environmental assessment review process, the National Park Service has selected alternative B for implementation. The selected action meets the purpose and need of the project by providing a safe driving surface for park visitors, enhancing visitor experience, and protecting the government investment while protecting cultural and natural resources. The selected action resolves poor road conditions and pavement edges, drainage issues, lane width inconsistencies, and narrow travel lanes along short sight distances along Bonnie Clare Road. Mesquite Spring Campground Road will be resurfaced, providing for long-term sustainability of park infrastructure; the Grapevine Ranger Station parking lot and adjoining sidewalks will meet the ADA/ABA accessibility standards.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying criteria identified in section 101 of the National Environmental Policy Act of 1969, as amended (NEPA), to each alternative considered. In accordance with NEPA, the environmentally preferred alternative will:

- fulfill the responsibility of each generation as trustee of the environment for succeeding generations
- assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings

- attain the widest range of beneficial uses of the environment without degradation or other undesirable and unintended consequences
- preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources (NEPA, section 101)

The environmentally preferred alternative in the environmental assessment is the NPS preferred alternative (alternative B). This alternative was selected based on the following criteria:

- protect public health, safety, and welfare by reducing the number and severity of motor vehicle accidents and by incorporating ADA/ABA improvements in parking lots (criteria 2 and 3)
- minimize the loss or damage of natural and cultural resources by reducing the potential for accidents that cause motor vehicles to leave the road surface, formalizing the boundary entrance sign parking lot, and removing roadside turnouts that may destroy adjacent vegetation and cultural sites (criteria 1 and 4)
- allow continued safe use of the roadways and parking lots by park visitors for enjoying the scenery of Death Valley National Park (criterion 5)
- minimize adverse effects to some important historic, cultural, and natural aspects of our national heritage to the greatest extent possible (criterion 4)

The selected alternative will protect visitor experience and improve traffic safety with minimal disturbance to natural and cultural resources; therefore, alternative B is the environmentally preferred alternative regarding aesthetic, cultural, and natural resources.

MITIGATION

Mitigation measures are presented as part of the action alternatives. These actions have been developed to lessen the adverse effects of the proposed action. Mitigation measures will be funded through the construction budget unless specifically noted in the following table. Appropriate mitigation measures will be included in the construction contract specifications.

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
General Considerations	The NPS project manager will ensure that the project remains confined within the parameters established in the compliance documents and that mitigation measures will be properly implemented.	FHWA and NPS project manager write project specifications to correspond with compliance documents NPS – Park facility manager ensures enforcement
	Construction zones will be identified and flagged before construction begins and all disturbances will be confined to the construction area. All project personnel will be instructed that their activities must be confined to locations within flagged areas and all equipment and materials must remain within these areas. Disturbances beyond the construction zone will be prohibited. This mitigation does not exclude necessary temporary structures, including silt-control barriers.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Best management practices for drainage and sediment control, as identified and used by the Federal Highway Administration and the National Park Service, will be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas during construction. Use of best management practices in the project area for drainage area protection will include all or some of the following actions, depending on site-specific requirements: (1) keeping disturbed areas small to minimize the amount of exposed soil and the potential for erosion; (2) placing waste and excess excavated materials outside drainages to avoid sedimentation; (3) installing 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 and removing these features after construction; (4) conducting regular site inspections during construction to ensure that erosion-control measures were properly installed and functioning effectively; and (5) storing, using, and disposing of chemicals, fuels, and other toxic materials appropriately.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	A hazardous spill plan will be in place, stating what actions will be taken in the case of a spill, notification measures, and preventive measures to be implemented, including placement of refueling facilities, storage, and handling hazardous materials.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	All equipment on the project will be maintained in a clean and well-functioning condition to avoid or minimize contamination from automotive fluids. All equipment will be inspected daily.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
General Considerations (cont.)	Provisions for traffic delays shorter than 30 minutes will be made during employee commute times.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Contractors will be required to properly maintain construction equipment (i.e., mufflers) to minimize noise of equipment use.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond work area boundaries. This mitigation does not exclude necessary temporary structures including erosion-control fencing.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Material stockpiling, machinery storage, and vehicle parking will only be permitted at the mixing table and in designated areas.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project area upon project completion. Any asphalt or concrete 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 metal and concrete.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Unnecessary construction vehicle engine idling will be limited to reduce noxious emissions.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	All fuel, transmission, or brake fluid leaks, or other hazardous waste leaks, spills, or releases will be reported immediately to the designated safety officer. The contractor will be responsible for spill material removal and disposal to an approved off-site landfill and, if necessary, will notify the appropriate federal agency.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Construction will be scheduled to avoid the excessively high summer temperatures. Construction will take place during the winter, spring, and fall months to the extent practicable.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Staging for construction vehicles and equipment will be sited in previously disturbed areas approved by the National Park Service, outside of high visitor use areas, and will be clearly identified in advance.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
General Considerations (cont.)	Construction debris will be immediately hauled from the park to an appropriate disposal location.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
Geology and Soils	New rock cuts will be designed and completed in a manner to resemble the existing rock slopes and textures.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Topsoil will be saved, stock-piled, and replaced in-place after construction is completed.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
Vegetation	Disturbed areas that are not paved and formalized, including roadside berms, abandoned parking areas, and turnouts, will be returned to natural conditions using active restoration to repair selected disturbed areas and control invasive species.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park botanist ensures enforcement
	Ground surface treatment will include grading to natural contours, roughing/scarification, and vertical mulching to promote natural seeding.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park botanist ensures enforcement
	Disturbed areas will be monitored after construction to determine if remedial actions such as installation of erosion-control structures or nonnative plant species control are necessary.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park botanist ensures enforcement
	Dust abatement measures will be used to reduce deposition on vegetation adjacent to and downwind of project sites.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park botanist ensures enforcement
Wildlife Habitat	Before construction activities commence on cliffs and rocks, a biological monitor must first move herpetile species from the construction area.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park wildlife biologist to ensure enforcement
	A biological monitor should be present if cliffs and large rocks are going to be moved or dismantled in order to move chuckwalla and other herpetile species to safety. Similarly, surveys of other areas to be impacted will be conducted (such as turning over rocks and digging up burrows) in order to capture and move animals to areas where construction has been completed, or where construction activities will not impact their habitat.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park wildlife biologist to ensure enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Wildlife Habitat (cont.)	<p>A survey strategy will be implemented to avoid potential habitat and noise impacts to the federally listed least Bell's vireo and southwestern willow flycatcher. Construction on the proposed project will occur in areas adjacent to suitable habitat for the least Bell's vireo and southwestern willow flycatcher between February and April of the project year. Beginning April 10, all construction activities will cease in areas within a 0.25-mile buffer of suitable habitat and a qualified biologist will conduct surveys for these two species according to a survey strategy based on the U.S. Fish and Wildlife Service's most recent survey guidelines and protocols for the least Bell's vireo and southwestern willow flycatcher. Slight revisions have been made to the timing and number of southwestern willow flycatcher surveys based on consultation with the U.S. Fish and Wildlife Service. For instance, the National Park Service would not conduct surveys during the third survey period, as outlined in southwestern willow flycatcher survey protocol, unless birds are detected during the first two survey periods. If neither species is detected during surveys, then construction activities would resume in areas adjacent to suitable habitat. However, if either species is detected, and surveys confirm that birds are nesting or nesting is a possible outcome, then the National Park Service will resume construction activities adjacent to suitable habitat after (1) the avian nesting and breeding season ends (i.e., August 16), or (2) it has been determined by a qualified biologist that the birds are not attempting to nest again or any young have fledged.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park wildlife biologist, chief of resources management, and facility manager to ensure enforcement</p>
	<p>Temporary run-off barriers will be installed during construction to avoid contaminating desert wash habitats.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park hydrologist to ensure enforcement</p>
	<p>The contractor and all employees and subcontractors will be required to participate in desert tortoise orientation, taught by a qualified biologist, prior to beginning work. The contractor shall coordinate and schedule attendance with the FHWA contracting officer and the park environmental protection specialist or wildlife biologist. The park will provide handouts with tortoise information and guidelines to all construction workers. The handouts shall be strictly followed at all times.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park wildlife biologist to ensure enforcement</p>

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Invasive Species	<p>Undesirable plant species will be controlled in high-priority areas and other undesirable species will be monitored and controlled, as necessary. To prevent the introduction and minimize the spread of nonnative vegetation and noxious weeds, measures will be implemented during construction: (1) minimize soil disturbance; (2) pressure wash and/or steam clean all construction equipment to ensure that all equipment, machinery, rocks, gravel, or other materials are cleaned and weed free before entering Death Valley National Park; (3) brush down all construction equipment after every trip while transporting material outside the construction limits; (4) cover all haul trucks bringing fill material from outside the park to prevent seed transport; (5) limit vehicle parking to existing roadways, parking lots, or access routes; (6) limit disturbance to roadsides, including limiting equipment to the roadbed area—no machinery or equipment should access areas outside work area boundaries (construction limits); and (7) obtain all fill, rock, or additional topsoil from the project area, if possible. If not possible, obtaining weed-free sources from NPS-approved sources outside the park will be required.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park invasive plant specialist to ensure enforcement</p>
	<p>Disturbed areas will be monitored for up to one year following construction (until the disturbance has subsided) to identify growth of noxious weeds or nonnative vegetation and treat any individuals or patches observed. Treatment of nonnative vegetation will be completed in accordance with Director’s Order 13: <i>Integrated Pest Management Guidelines</i>.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park invasive plant specialist to ensure enforcement</p>
	<p>In an effort to avoid introduction of nonnative/ noxious plant species, no imported topsoil or hay bales will be used during revegetation, if attempted. On a case-by-case basis, the following materials may be used for any erosion-control dams that may be necessary: certified weed-free rice straw, cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park invasive plant specialist to ensure enforcement</p>
	<p>Excess soil material that is infested with the invasive species <i>Halogeton glomeratus</i> is to be buried a minimum of 18.0 inches (45.7 centimeters) deep and covered with clean soil at the designated mixing table site. This species has been identified adjacent to the construction area on Bureau of Land Management land, on a few sites in the proposed construction corridor, and is a serious threat to the park.</p>	<p>FHWA and NPS project manager write project specifications to address these considerations NPS – Park invasive plant specialist to ensure enforcement</p>

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Invasive Species (cont.)	To prevent sedimentation to watercourses, a silt fence or similar device will be installed using best management practices for controlling nonpoint source pollution during construction and sedimentation and erosion during small storm events.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park hydrologist to ensure enforcement
	All potential contaminants (rubbish or debris, introduction of nonnative species, etc.) will be excluded or removed from the environment.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park invasive plant specialist to ensure enforcement
Water Quality	Fueling project-related vehicles and equipment will take place away from water sources, and a contingency plan to control petroleum product spills during the project will be developed. Absorbent pads and containment booms will be stored on-site to facilitate cleanup of any accidental petroleum spills.	FHWA and NPS project manager write project specifications to address these considerations NPS – delegated project monitor ensures enforcement
	Any soil exposed near water as a result of the project shall be protected from erosion (with plastic sheeting, filter fabric, etc.) after exposure, and stabilized as soon as practicable (with vegetation matting, etc.). If erosion-control materials are used, only tightly woven fiber netting or nonbinding materials, e.g., rice straw shall be used for erosion control or other purposes at the project site to ensure that small mammals and reptiles do not become trapped. No plastic-tied wattles shall be used.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager to ensure enforcement
	Temporary erosion-control measures will be implemented to minimize minor and short-term impacts to water quality. Sediment traps or logs, silt fences, riprap, erosion check structures, and/or filters will be considered.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park hydrologist to ensure enforcement
Air Quality	Fugitive dust plumes will be reduced to the extent possible by water sprinkling during earth-disturbing activities. There will be no commitment from the park to provide water from Scotty's Castle or from within the park. The options for sources of water for construction will include Beatty, Nevada. Water acquired from outside sources will be treated for aquatic invasive species and pathogens, if needed.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager and park aquatic ecologist ensure enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Archeological Resources	If, during construction, archeological resources are discovered, all work in the immediate vicinity of the discovery will be halted until the resources are identified by an archeologist. If it is determined that the archeological resources are important, they will be documented and an appropriate mitigation strategy developed, if necessary, in consultation with the California SHPO and the Timbisha Shoshone tribal historic preservation officer (THPO).	FHWA and NPS project manager write project specifications to address these considerations NPS – Park archeologist ensures enforcement
	Should human remains, funerary objects, sacred objects, or objects of cultural patrimony be discovered during construction, park staff will follow provisions outlined in the Native American Graves Protection and Repatriation Act of 1990.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park archeologist ensures enforcement
	Avoid impacts to archeological sites through contract language requiring the construction contractor to attend preconstruction meetings with park archeologists to develop archeological site protection and avoidance measures that will be implemented near areas within Grapevine Canyon Archeological District, Indian Camp, and along Mesquite Spring Campground Road prior to initiating construction activities. The plan will be documented in an archeological monitoring and inadvertent discovery plan, which will outline areas that will undergo archeological monitoring during construction, and will designate who will perform the monitoring (e.g., park archeologist, Timbisha Shoshone monitors, etc.).	FHWA and NPS project manager write project specifications to address these considerations NPS – Park archeologist ensures enforcement
	The park staff will develop a plan of action for inadvertent archeological discoveries during construction. The inadvertent discovery plan of action will be documented in an archeological monitoring and inadvertent discovery plan.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park archeologist ensures enforcement
	Paleontological remains and archeological specimens found within the construction area will only be removed by the National Park Service or by NPS-designated representatives.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park archeologist ensures enforcement
	Avoid cuts to rock faces near archeological sites.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park cultural resources manager ensures enforcement
	Nominate Grapevine Canyon Archeological District to the National Register of Historic Places.	NPS – Park cultural resources manager ensures enforcement
	Upon completion of construction, barriers will be created to prevent vehicles from leaving the travel lane at these locations.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Cultural Landscapes	The park will complete the Historic American Landscape Survey to document Bonnie Clare Road Historic Property before construction begins.	NPS – Park cultural resources manager ensures enforcement
	Use tinted concrete on curbs, paved ditches, and low water crossings that blend with the surrounding landscape along Bonnie Clare Road.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Minimize cuts to canyon walls through use of narrow paved ditches along the Bonnie Clare Road Historic Property.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Cut canyon wall and rock faces to match current slopes of those same walls and faces along Bonnie Clare Road Historic Property to minimize visual appearance and effects to the feeling and setting of the road.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Implement a fence preservation/rehabilitation plan for the Death Valley Scotty Historic District historic fence during construction.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park cultural resources manager ensures enforcement
	During construction, retain existing historic fence posts and construct new fence posts to rehabilitate the original fence associated with Death Valley Scotty Historic District in accordance with <i>Secretary of the Interior's Standards</i> and as outlined in the fence preservation/rehabilitation plan.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park cultural resources manager ensures enforcement
	Reduce width of Bonnie Clare Road segment to 20 feet through the most sensitive areas of Death Valley Scotty Historic District between mileposts 4.5 and 4.7.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Limit horizontal and vertical disturbance to areas that have been previously disturbed through Indian Camp at Death Valley Scotty Historic District.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park cultural resources manager ensures enforcement
Historic Structures / District	Minimize impacts to vegetation at Grapevine Ranger Station.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park botanist ensures enforcement
	Match existing design and materials and use tinted concrete for ramp, curbs, gutters, and sidewalk replacement at Grapevine Ranger Station.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement

MITIGATION MEASURES OF THE SELECTED ALTERNATIVE

Resource Area	Mitigation	Responsible Party
Visitor Use and Experience	One lane of traffic will remain open during construction.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement
	Traffic delays that result from construction activities will be limited to a 30-minute maximum.	FHWA and NPS project manager write project specifications to address these considerations NPS – Park facility manager ensures enforcement

WHY THE SELECTED ACTION WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined by 40 CFR 1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an environmental impact statement: No major adverse or beneficial impacts were identified that will require analysis in an environmental impact statement.

The primary impact topics identified in the environmental analysis and documented in the environmental assessment included the following: soils and geology, biological resources (vegetation and wildlife), wetlands, floodplains, water quality, threatened and endangered species and species of special concern, park operations, cultural landscapes, archeological resources, historic structures, visitor use and experience, and health and safety. Impacts to these resources were identified at the negligible to moderate level.

Degree of effect on public health or safety: The selected alternative includes a number of actions that will contribute to the health and safety of motorists, such as a consistent 22-foot to 24-foot paved width (except for a short distance between mileposts 4.5 and 4.7 near the entrance to Scotty’s Castle where the paved road width will be reduced to 20 feet to reduce impacts to Death Valley Scotty Historic District), wider shoulders, wider turns, increased sight distances, new rock and slope faces, better flood control, additional turnouts, and improved access to Scotty’s Castle on Bonnie Clare Road. During construction, interactions between motorists and construction traffic will be minimized by vehicle stops, barriers, and standard road construction safety procedures. Construction flaggers/traffic controllers will be asked to cease road work and open a travel lane for emergency responders, should an accident occur. Impacts during construction will be short term and negligible. Mesquite Spring Campground Road and Grapevine Range Station parking lot will be closed during resurfacing and reconstruction and no impacts are anticipated. Once construction is complete, the improved roads should reduce the number of accidents, which are already low. The improved road will also make law enforcement or emergency response faster due to a road that is easier to navigate. These road improvements constitute a long-term beneficial impact to health and safety.

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: As described in the environmental assessment, designated critical habitat, ecologically critical areas, wild and scenic rivers, and other unique natural areas will not be affected. Through consultation with appropriate agencies and research, the National Park Service has determined that there are no known designated critical habitat, ecologically critical areas, wild and scenic rivers, and other unique natural areas identified in the project area that could be affected by current project actions. Through research, it was determined that there are no prime or unique farmlands associated with the project area.

In accordance with 36 CFR 800, the National Park Service has determined the selected action will have an adverse effect on the historic properties and has consulted with the California SHPO, Timbisha Shoshone Tribe, and the THPO to develop a memorandum of agreement outlining measures to mitigate the adverse effects. The memorandum of agreement is attached to this FONSI (see attachment B of this FONSI).

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources: As described in the environmental assessment, the selected action will have short- and long-term, negligible, and minor to moderate, adverse impacts to archeological resources; short- and long-term, negligible to minor, adverse impacts to a historic district; and short- and long-term, minor to moderate, adverse impacts to cultural landscapes. There will be no major adverse effects to historic properties. Adverse impacts to historic properties are addressed in a memorandum of agreement (see attachment B of this FONSI).

Degree to which effects on the quality of the human environment are likely to be highly controversial: There were no highly controversial effects identified during either preparation of the environmental assessment or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There were no highly uncertain, unique, or unknown risks identified during either preparation of the environmental assessment or the public review period.

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 selected action neither establishes a NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts: The selected alternative of the environmental assessment analyzed impacts to soils and geology, biological resources (vegetation and wildlife), wetlands, floodplains, water quality, threatened and endangered species and species of special concern, park operations, cultural landscapes, archeological resources, historic structures, visitor use and experience, and health and safety. As described in the environmental assessment, cumulative impacts were determined by combining the impacts of the selected alternative with other past, present, and reasonably foreseeable future actions. The selected action will not result in or contribute to cumulatively significant impacts.

Degree of effect on soils; biological resources; and threatened, endangered, and species of special concern; coastal and marine resources; or water quality: The selected action will have no effect on coastal and marine resources. The selected alternative will contribute short- and long-term, minor to moderate, adverse impacts to soils and geology; long-term negligible impacts to vegetation; long-term negligible impacts to wetlands at spring heads; short- and long-term, negligible to minor, adverse impacts to nonwetland riparian vegetation; and short- and long-term, minor, adverse impacts to floodplains; and short- and long-term, negligible to minor, adverse impacts to wildlife, special status species, and water quality.

Whether the action threatens a violation of federal, state, or local environmental protection laws: The selected action violates no federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT AND AGENCY AND TRIBAL CONSULTATION

Scoping

A press release initiating scoping and describing the proposed action was issued on October 29, 2010, and public comments were solicited during a public scoping period that ended December 1, 2010. One comment was received on November 24, 2010, from Inyo County, expressing support for the road rehabilitation project and encouraging the park to minimize road closures during construction.

In accordance with the National Historic Preservation Act (NHPA), consultation with the California SHPO and the Timbisha Shoshone Tribe was initiated at the onset of the NEPA process and continued throughout development of the environmental assessment and separate NHPA, section 106 process. The separate NHPA, section 106 process resulted in a memorandum of agreement outlining measures to mitigate the adverse effects of the preferred alternative. The California SHPO signed the memorandum of agreement on June 11, 2012, and the Timbisha Shoshone tribal chairman signed the memorandum of agreement as a concurring party on June 12, 2012.

A letter was sent to the U.S. Fish and Wildlife Service on September 22, 2011, and a response was received on October 19, 2011. The U.S. Fish and Wildlife Service concurred with a “not likely to adversely affect” determination, fulfilling section 7 consultation requirements on March 30, 2012. The U.S. Fish and Wildlife Service also clarified in its memo to the park superintendent dated March 30, 2012, that desert tortoises have not been observed in the project area, and the potential for desert tortoises to occur in the project area is extremely low. For these reasons, the U.S. Fish and Wildlife Service recommended that the National Park Service does not need to implement protective mitigation measures for tortoises described in the environmental assessment. Changes to the project schedule necessitated re-initiation of informal consultation. Originally, the project was proposed to largely avoid the avian breeding season, but project schedule and feasibility changes necessitated implementing part of this construction project during avian breeding and nesting season. Informal consultation for these changes to project timing began on July 12, 2012, with a telephone conference between the National Park Service and U.S. Fish and Wildlife Service staff. From there, the National Park Service developed a survey strategy, informed by the expertise of U.S. Fish and Wildlife Service biologists. A letter was sent by the park superintendent to the U.S. Fish and Wildlife Service section 7 coordinator asking for re-initiation of informal consultation and concurrence with the survey strategy for avoiding adverse impacts to the least Bell’s vireo and southwestern willow flycatcher. The U.S. Fish and Wildlife Service responded with a memorandum dated September 17, 2012, signed by the section 7 coordinator, concurring with the determination of “may affect, not likely to adversely affect” for least Bell’s vireo and southwestern willow flycatcher for the project, as mitigated

by the survey strategy. This memorandum also referenced the March 30, 2012, memo and clarified that impacts to tortoises did not require extensive mitigation because the species was unlikely to occur in the project area. Based on this record of informal consultation and U.S. Fish and Wildlife Service concurrence with NPS determinations of “may affect, not likely to adversely affect,” formal consultation with the U.S. Fish and Wildlife Service was not necessary for this project. All mitigations and modifications that resulted from the informal consultation are included in this document’s mitigation table under the heading “Wildlife Habitat.”

PUBLIC COMMENT ON ENVIRONMENTAL ASSESSMENT

The environmental assessment was available for formal public and agency review for a 30-day review period from February 16 through March 19, 2012, and approximately 50 copies of the document were distributed to a variety of interested individuals, agencies, tribes, and organizations.

The document was available on the Internet at <http://parkplanning.nps.gov/deva> and hard copies were made available at the visitor centers, park headquarters, and local libraries in Amargosa Valley, Bishop, Independence, Lone Pine, Pahrump, and Ridgecrest.

Two pieces of correspondence were received during the review period. One letter was received from Inyo County in support of the project.

The second letter, received from an individual, did not result in changes in the environmental assessment; however, it did raise concerns about the project’s potential effects to cultural resources, and in particular cultural landscapes. Cultural landscapes are their own impact topic in the environmental assessment, and the affected environment section of the document discusses cultural landscapes in detail, providing eight pages of photographs and descriptions in order to provide context for understanding this resource within the proposed project area. The “Environmental Consequences” section of the environmental assessment also provides a road segment-by-segment description of the impacts to historic properties, including a detailed eight-page analysis for impacts to cultural landscapes. Full details related to historic properties are provided in the assessment of effect report initiated through the National Historic Preservation Act of 1966 (NHPA; 36 CFR 800) section 106 process. The report includes detailed maps with construction limits and locations of archeological and other sensitive resources, and was prepared in consultation with the California SHPO and the Timbisha Shoshone Tribe. This report is currently not available to the public due to the sensitive nature of the resources and their locations.

Another concern expressed in this comment was that public safety improvements were speculative and that a potential decrease in dangerous driving conditions and a reduction in vehicular accidents is not a reasonable justification for the road straightening and impacts to the Bonnie Clare cultural landscape. As stated in the purpose and need section of the environmental assessment, widening the curves will address the need to safely meet current and future projected traffic volumes and vehicle types (i.e., larger vehicles such as buses and RVs). Some sections of the road have a width as narrow as 17 feet, which is insufficient for safely meeting these transportation needs. Vehicles leaving the roadway due to the sharpness of the curves hasten the disintegration of roadway edges, creating ongoing maintenance and safety concerns. The environmental assessment acknowledges that the number of accidents in the last eight years is low. However, preventing reasonably foreseeable accidents due to inadequate sight distances and tight curves that create hazards for drivers is one of the needs identified for this project.

The comments also expressed concern about the historic fence. The environmental assessment acknowledges an adverse impact to the fence. Revised plans based on consultation with the SHPO will result in the relocation of 65% of fence posts rather than 85% as stated in the environmental assessment, resulting in a lower impact level for the selected action. The environmental assessment also discloses that the existing fence posts will be used to build a new mold for the production of replacement posts, which will be built with concrete that matches the original composition of the concrete posts. Posts that are in good condition will be retained and reused.

The comments also requested more historical context in the environmental document. Additional documents have been developed in support of this project and have been reviewed by the California SHPO, the Timbisha Shoshone Tribe, and NPS decision makers during the section 106 consultation process. These documents include:

- 2006 Ethnographic Report: Rehabilitate Bonnie Clare / Ubehebe Roads. Johnson Consulting
- 2009 Historic Resource Study: Death Valley Scotty Historic District. On file at Death Valley National Park Cultural Resource Office, 2009. Death Valley National Park, Death Valley, California. Livingston, Dewey
- 2011 Memo to Park Archeologist re: Mesquite Spring Road Survey, CRP No. 11-071, WACC Project No. DEVA 2011 J, Death Valley National Park, Inyo County, California. May 27, 2011. National Park Service, McCuiston, Emily
- 2011c “Draft National Register Nomination Form: Grapevine Developed Area.” National Park Service, Death Valley National Park, California
- 2011d “100% Draft Cultural Landscapes Inventory: Bonnie Clare Road.” National Park Service, Death Valley National Park, California
- n.p. Draft Historic Fence Preservation Plan in Association with Bonnie Clare Road 4R Project (DEVA 88910), Death Valley National Park. August 2011 draft
- 2012 Consensus Determination of Eligibility for the National Register Of Historic Places in Compliance With Section 106 Of The National Historic Preservation Act of 1966 for the Grapevine Canyon Archeological District, Death Valley National Park

The documents listed above contain detailed information regarding the historic properties including detailed historic contexts. A separate assessment of effect has also been prepared and reviewed by the SHPO and Timbisha Shoshone Tribe resulting in concurrence with the findings and a memorandum of agreement to address adverse affects to historic properties. The California SHPO signed the memorandum of agreement on June 11, 2012, and the Timbisha Shoshone tribal chairman signed the memorandum of agreement as a concurring party on June 12, 2012.

The purpose of the environmental assessment is to provide a concise and focused discussion of the resources and potential impacts to the resources. Only the relevant aspects of the historic properties that will be potentially affected are identified in the environmental assessment. Additional historic context or description about the resources, although interesting, would substantially increase the length of the document, would not change the description of the impacts or outcome of the

assessment, and would not provide decision makers with additional information not already provided.

CONCLUSION

The selected action does not constitute an action that normally requires preparation of an environmental impact statement. The selected action will not have a major impact on the human environment. Negative environmental impacts that could occur are considered short term and negligible to moderate in intensity, and long term and negligible to moderate in intensity. Beneficial environmental impacts that could occur are considered long term and minor to moderate in intensity. Mitigation measures will be incorporated into the selected action (preferred alternative) to ensure there are no significant impacts. There are no foreseen significant adverse impacts on natural or cultural resources, public health and safety, park management, or other unique characteristics of the area and region. Short-term, minor, adverse, and long-term, minor to moderate, beneficial impacts to the visitor experience will result from the selected action. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected action will not violate any federal, state, or local environmental protection laws, nor will it cause impairment of park resources or values.

Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and, thus, will not be prepared.

Recommended:



Sarah Craighead, Superintendent
Death Valley National Park

Date 9/24/12

Approved:



Christine S. Lehnertz, Pacific West Regional Director
National Park Service

Date 09/27/2012

ATTACHMENTS

- A. Determination of No Impairment
- B. Memorandum of Agreement

APPENDIX A

Determination of No Impairment Reconstruction of Bonnie Clare Road, Milepost 0.0 to Milepost 7.7; Reconstruction of Grapevine Ranger Station Parking Lot and Sidewalks; and Resurfacing Mesquite Spring Campground Road, Milepost 0.0 to Milepost 1.9

**Death Valley National Park
National Park Service
September 2012**

The National Park Service (NPS) has determined that implementation of the selected alternative will not constitute impairment to the resources or values of Death Valley National Park. This conclusion is based on a thorough analysis of the environmental impacts described in the Reconstruction of Bonnie Clare Road Environmental Assessment, relevant scientific studies and cultural resource reports, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2006*. The selected alternative will not result in major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Death Valley National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant NPS planning documents.

This nonimpairment determination has been prepared for the selected alternative described in the Finding of No Significant Impairment (FONSI), for the topics listed below. An impairment determination is not made for visitor experience, socioeconomics, public health and safety, environmental justice, land use, and park operations because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the 1916 Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. Specific impact areas and the detailed analysis that led to the nonimpairment determination are described below.

FINDINGS ON IMPAIRMENT FOR SOILS AND GEOLOGY

The selected alternative will have short- and long-term, minor to moderate, adverse impacts to geologic exposures and soils. The impacts to limestone and volcanic geologic exposures and derived soils of ridges and slopes within Grapevine Canyon will include the removal and redistribution of limestone and volcanic rocks and associated soils from a total of approximately 1.3 acres. Impacts to limestone and volcanic exposures will be minimized by ensuring the current slopes are maintained rather than sloping them to the originally proposed 1:2 ratio.

Impacts to road shoulder fill and desert wash sediments adjacent to the existing Bonnie Clare Road template will include grading; removal to install riprap, buried Jersey barrier, andrevet mattresses; aggregate base and asphalt overlay; and compaction during the construction phase. Approximately 1.4 acres of alluvial soil and road shoulder fill material will be covered and/or compacted.

Mesquite Spring Campground Road will be resurfaced in-place using an asphalt grinding process resulting in short-term, negligible, adverse impacts due to exposure of fill soils to precipitation events and dust generation.

The selected alternative will not result in impairment of soils and geology because the localized adverse impact levels are minor to moderate, and because mitigation measures have been developed to limit the extent of impacts to soils and geologic features. Post-development geologic exposures and soils will be managed under the provisions of the park's general management plan.

FINDINGS ON IMPAIRMENT FOR VEGETATION

The selected alternative will have long-term, direct and indirect, negligible impacts to upland vegetation types of Grapevine Canyon under this alternative. The upland desert scrub and desert wash shrubland vegetation types that have become established on rock outcrops, slopes, road shoulder fill (including berms), and in the desert washes within Grapevine Canyon (construction on Mesquite Spring Campground Road will occur within the existing template) will be cleared and soils/bedrock exposed. Shrubland vegetation removal from 1.3 acres of rock outcrops and slopes and 1.4 acres of existing roadbed shoulder fill and desert wash will result in loss of cover, structure, and vegetation diversity from regionally common plant communities within the park. Dust generated during certain types of construction activities inhibits photosynthesis activity and reproduction of individual plants in areas adjacent to these activities. Selected cacti will be transplanted to revegetation sites within the park resulting in rehabilitation of a native vegetation type. Following construction, the road shoulder area not further disturbed by maintenance activities will provide sites for annual plants and disturbance-oriented shrubs to re-establish.

Indian Camp parking lot will be closed and allowed to revegetate to upland shrublands and riparian woodlands on approximately 0.4 acre, resulting in long-term, minor, beneficial impacts to biotic species.

The selected alternative will not result in impairment of vegetation because while the impacts of the selected action are adverse, these impacts are to small areas of regionally common plant communities, and are further mitigated by the natural revegetation of the Indian Camp area under the selected alternative. Post-development upland vegetation types will be managed under the provisions of the general management plan.

FINDINGS ON IMPAIRMENT FOR WILDLIFE

There will be short- and long-term, negligible to minor, adverse impacts to upland wildlife habitat of Grapevine Canyon under this alternative due to loss of cover, structure, and vegetation diversity from a regionally common habitat within the project area. Individual reptiles, and small mammals in particular, will likely be covered over and crushed during earth moving and rock outcrop/slope reconstruction activities and others will disperse into the adjacent habitat causing competitive stress. During construction, predators drawn to the corridor to forage on displaced or crushed wildlife individuals are subject to vehicle collisions. Additional short-term, direct and indirect, negligible impacts to wildlife will include avoidance of active construction sites by wildlife species due to human presence, noise generation, and vibration from heavy equipment; sedimentation to surface water, particularly the stream, potentially affecting macrobenthic invertebrates; dust generation during construction; and pruning of mesic vegetation including grapevines and willow branches.

Following construction, the road shoulder area not further disturbed by maintenance activities will provide sites for ant hills to be formed and burrows for small mammals, resulting in short- and long-term negligible impacts to some wildlife species.

The selected alternative will not result in impairment of wildlife because the adversely impacted resources are regionally common, because the impacted area is localized to the road corridor and other developed areas, and because short- and long-term impact levels will not rise above the threshold of minor. Post-development wildlife will be managed under the provisions of the general management plan.

FINDINGS ON IMPAIRMENT FOR SPECIAL STATUS SPECIES

The selected alternative will have short- and long-term, direct and indirect, negligible to minor, adverse impacts to nonwetland riparian vegetation, wetland, and upland potential special status species habitat within Grapevine Canyon near Scotty's Castle and near the Mesquite Spring Campground entrance. A survey strategy will be implemented to avoid potential habitat and noise impacts to the federally listed least Bell's vireo and southwestern willow flycatcher. Construction on the proposed project will occur in areas adjacent to suitable habitat for the least Bell's vireo and southwestern willow flycatcher between February and April of the project year. Beginning April 10, all construction activities will cease in areas within a 0.25-mile buffer of suitable habitat and a qualified biologist will conduct surveys for these two species according to a survey strategy based on the U.S. Fish and Wildlife Service's most recent survey guidelines and protocols for the least Bell's vireo and southwestern willow flycatcher. Slight revisions have been made to the timing and number of southwestern willow flycatcher surveys based on consultation with the U.S. Fish and Wildlife Service. For instance, the National Park Service would not conduct surveys during the third survey period, as outlined in southwestern willow flycatcher survey protocol, unless birds are detected during the first two survey periods. If neither species is detected during surveys, then construction activities would resume in areas adjacent to suitable habitat. However, if either species is detected, and surveys confirm that birds are nesting or nesting is a possible outcome, then the National Park Service will resume construction activities adjacent to suitable habitat after (1) the avian nesting and breeding season ends (i.e., August 16); or (2) it has been determined by a qualified biologist that the birds are not attempting to nest again or any young have fledged. The U.S. Fish and Wildlife Service has concurred with the NPS determination of "may affect, not likely to adversely affect" for the selected action, including implementation of this survey strategy. Run-off barriers will be used to avoid contaminating desert washes resulting in short-term, direct, beneficial impacts to reptiles and breeding birds along road corridors.

Nonwetland riparian vegetation and wetland potential habitat for the federally and California-listed endangered least Bell's vireo and southwestern willow flycatcher will receive short- and long-term, direct and indirect, negligible, adverse impacts due to installation of underdrains at two Grapevine Canyon spring sites, pruning and trimming encroaching limbs and shrubs from over the travel lanes and road shoulder, and from dust generation.

The sparse, rocky, and steep creosote bush scrub habitat of the Bonnie Clare Road and Mesquite Spring Campground Road corridors is not considered habitat for the federally listed threatened desert tortoise. Based on informal consultation with the U.S. Fish and Wildlife Service, there will be no effect to this species.

The Panamint alligator lizard (a Bureau of Land Management sensitive species and California Department of Fish and Game species of special concern) was not observed during reptile surveys, but potential habitat of native grapevines will receive short-term, direct, negligible impacts due to pruning and trimming from over the road shoulder (approximately 0.08 acre [0.03 hectare]); and from dust generation. Limiting the amount of pruning and clearing to the road shoulder will reduce the area of impact to potential habitat, the vines will re-establish rapidly, and the selected action will result in short- and long-term, direct, negligible to minor, adverse effects to grapevine habitat and beneficial effects to adjacent shrub and tree canopy habitat due to avoidance.

Volcanic bedrock habitat for littleleaf rockcress will be removed to widen the roadway into the cliff wall to avoid impacts to wetlands and historic features on the opposite road shoulder, resulting in minor adverse impacts to a California (limited distribution) special status species due to habitat removal.

Because impact levels will not rise above minor for any special status species, and because the determination of effect for federally listed species is either no effect or not likely to adversely affect, the selected alternative will not result in impairment of any special status species.

FINDINGS ON IMPAIRMENT FOR WETLANDS, NONWETLAND RIPARIAN VEGETATION, AND FLOODPLAINS

Wetlands delineated within the road corridors occur near the existing toe-of-fill (on the shoulder at one spring site) within the fenceline of Death Valley Scotty Historic District, were nearly entirely avoided during the design process under the selected alternative, and will only receive impacts at two sites where spring flow emerges under the existing asphalt road surface. During the design process, wetlands delineated and mapped in 2005 were avoided to the extent possible. An additional field survey was conducted by the National Park Service in 2011 to further refine wetland boundary mapping, and guide the final design relative to avoidance resulting in short- and long-term, minor, indirect, beneficial impacts due to wetland protection and preservation.

At the two sites near mileposts 4.0 and 5.9 of Bonnie Clare Road, wetland hydrology is provided by springheads that emerge underneath the existing road surface; the two springs occur northeast of Scotty's Castle and at Cottonwood Corner, respectively; flows, water quality, and the groundwater table elevation will be protected by installing underdrains at both sites. Underdrain installation at these sites has been designed to minimize impacts to delineated and mapped palustrine emergent/shrub-scrub wetlands to less than 200 square feet, resulting in short-term, direct, negligible, adverse impacts due to the loss of wetlands established at the road edge. Providing underdrains and directing the spring flow to the streambed will result in long-term, direct, minor, beneficial impacts due to asphalt removal from spring orifices, underdrain installation to direct flows to the Grapevine Canyon streambed, and the resulting reduction in future maintenance activities at these sites.

Nonwetland riparian vegetation will be affected by pruning tree branches, tall shrub branches, canopies, and vines from the construction zone on the roadway fill slope/shoulder. Pruning activities will occur along the east side of Bonnie Clare Road from Scotty's Castle to Cottonwood Corner (approximately 0.58 acre) and near the terminus of Mesquite Spring Campground Road (approximately 0.002 acre). The mapped nonwetland riparian vegetation types within the project clearing limit include Fremont cottonwood woodland (0.1 acre, including removal of two nonnative, invasive fan palm trees, offspring from landscaping introduced in the 1930s), Goodding willow woodland (0.13 acre), honey mesquite shrubland (0.01 acre), mule's fat shrubland (0.24 acre),

common reed herbaceous vegetation (0.02 acre), and California grapevine shrubland (0.08 acre). Following construction, the vines will spread rapidly on the new road shoulder within one year and tree/tall shrub canopies will re-spread within two years. Limiting the amount of pruning and clearing to the road shoulder will reduce the area of impact and will result in short- and long-term, direct, negligible to minor, beneficial effects to nonwetland riparian shrub and tree canopy habitat. Pruning and clearing approximately 0.6 acre (0.2 hectare) of nonwetland riparian vegetation will result in short- and long-term, indirect and direct, minor, adverse impacts due to loss of vegetation cover and habitat.

The Indian Camp parking lot will be closed and allowed to revegetate to upland shrublands and riparian woodlands/shrublands on approximately 0.4 acre (0.16 hectares), resulting in long-term, direct, minor, beneficial impacts to nonwetland riparian vegetation types and habitat due to tree and shrub re-establishment on this presently disturbed site.

Affected floodplains include portions of Grapevine Canyon, desert washes tributary to Grapevine Canyon, and alluvial fans of Death Valley Wash. Bonnie Clare and Mesquite Spring Campground roads occupy the Grapevine Canyon and Death Valley Wash floodplains for approximately 4.6 miles (7.4 kilometer [km]) and 0.1 mile (0.2 km), respectively. Approximately 4,000 linear feet (1,219 linear meters) of nonwetland riparian vegetation types and wetland vegetation established in proximity to Bonnie Clare and Mesquite Spring Campground roads will be subject to sedimentation from disturbed road fill erosion during precipitation events, resulting in short-term, direct, negligible to minor, adverse impacts. The floodplains of Grapevine Canyon and Death Valley Wash will receive and transport runoff and sediments from precipitation events and flooding of the construction site, resulting in short-term, direct, negligible to minor, adverse impacts to desert wash vegetation on the road shoulder and along the streambed. Drainage features within the selected alternative will have a short- and long-term, minor, beneficial effect on floodplain function compared to the no-action alternative. The road template will be engineered to provide efficient drainage and will withstand moderate flood events without the need for maintenance and repairs, which are also impacts to the floodplain. Drainage features that direct flowing water along the sides of the road, when possible, and direct water across the road, when necessary, will help maintain natural downslope movement of water, sediment, and nutrients.

The wetlands, nonwetland riparian vegetation, and floodplains are noted in the general management plan and other park planning documents as important resources to be protected. The selected alternative will not result in impairment of wetlands, nonwetland riparian vegetation, or floodplains because the impact to these resources will range from a negligible to minor, adverse effect. In addition, wetland avoidance, underdrain construction, opening spring orifices, drainage feature construction, and revegetation and vegetation re-establishment will result in minor beneficial impacts to these resources. Post-development wetlands, nonwetland riparian vegetation, and floodplains will be managed under the provisions of the general management plan.

FINDINGS ON IMPAIRMENT FOR WATER QUALITY

The selected alternative will have short- and long-term, negligible to minor, adverse impacts to water quality in Grapevine Canyon. Mesquite Spring Campground Road will be resurfaced in-place. Impacts to the spring and seep areas and to water quality will include site excavation, underdrain installation, and covering by roadbed material and an asphalt overlay on approximately 0.08 acre of spring and seep area. Additional water quality impacts will result by construction activity adjacent to an approximately 350-foot reach of the flowing stream at the roadway toe-of-fill on the edge of

Scotty's Castle picnic area. Removing the existing roadway layers, installing underdrains, and replacing the road surface layers from a total of approximately 0.08 acre will result in short-term, minor, adverse impacts to the water quality of the springs due to sedimentation and temporary capture or redirection of flows. Construction adjacent to approximately 350 feet of flowing stream will result in short-term, minor, adverse impacts to water quality due to sedimentation. Approved mitigation will reduce short-term impacts to water quality to negligible due to sedimentation. In the long term, sedimentation from road shoulders and slopes during precipitation events, contamination from petrochemicals and metals deposited by vehicles on the road surface, and application of herbicides to control weeds becoming established on disturbed soils of road shoulders and slopes will result in negligible to minor and adverse impacts to water quality.

Although surface water and springs are noted in the general management plan and other park planning documents as important resources to be protected, the selected alternative will not result in impairment of these resources because the impact to them will be minimized by appropriate mitigation measures and impact levels will not rise above the threshold of minor. Post-development water surfaces and springs will be managed under the provisions of the general management plan.

FINDINGS ON IMPAIRMENT FOR ARCHEOLOGY

The selected alternative will have short- and long-term, negligible, and minor to moderate, adverse impacts to archeological resources. Twelve (11 contributing and 1 noncontributing) of the 47 archeological resources recorded in Grapevine Canyon Archeological District are within 20 meters of the edge of Bonnie Clare Road. There are several locations where the canyon walls, which are contributing features of the archeological district and are ethnographically important to the Timbisha Shoshone Tribe, will be cut. Archeological site CA-INY-4850 is currently bisected by Bonnie Clare Road; however, the current project design will avoid impacts to intact deposits at this location. Three other contributing archeological sites (CA-INY-2873, CA-INY-2872, and CA-INY-2881) have been mapped in or immediately adjacent to project boundaries.

There are four archeological sites within or adjacent to the area of potential effect for road resurfacing. There are no recorded archeological deposits from sites CA-INY-4822, CA-INY-4851H, or CA-INY-4852H within the existing road prism. A portion of the old road at site CA-INY-04734H encroaches onto the existing road prism, but there are no recorded artifacts associated with this site within the area of potential effect for the project.

To mitigate potential adverse impacts to individual contributing archeological resources within Grapevine Canyon Archeological District and the archeological resources along Mesquite Spring Campground Road prior to any construction activities, the National Park Service plans to use contract language requiring the construction contractor to attend pre-construction meetings with park archeologists and other appropriate parties as identified by the park. During these meetings, park personnel and the contractor will develop archeological site protection and avoidance measures that will be implemented prior to initiating construction activities. The types of measures that will be developed will be site and action specific, but include the presence of archeological and/or Timbisha Shoshone monitors during construction activities and/or the use of temporary fencing or other materials to establish construction boundaries near sites. In addition, the park will develop a plan of action for inadvertent archeological discoveries during construction. The avoidance measures and inadvertent discovery plan will be documented in an archeological monitoring and inadvertent discovery plan.

Pre-construction meetings and development and implementation of the archeological monitoring and inadvertent discovery plan will result in avoidance of archeological deposits within Grapevine Canyon Archeological District and along Mesquite Spring Campground Road. However, cuts to the canyon walls will adversely impact the natural resources that are ethnographically significant to the Timbisha Shoshone Tribe and that bind the Grapevine Canyon Archeological District into a contiguous district. In accordance with 36 CFR 800, the National Park Service has determined the selected alternative will have an adverse effect on Grapevine Canyon Archeological District and has consulted with the California SHPO and the Timbisha Shoshone Tribe to develop a memorandum of agreement outlining measures to mitigate the adverse effects of the selected alternative. The memorandum of agreement was signed by the California SHPO on June 11, 2012, and stipulates that Grapevine Canyon Archeological District will be nominated for listing in the National Register of Historic Places. The Timbisha Shoshone tribal chairman signed the memorandum of agreement as a concurring party on June 12, 2012.

The selected alternative will not result in impairment because the archeological resource will be avoided and known impacts to Grapevine Canyon Archeological District (e.g., impacts to the canyon walls) will be minimized by appropriate mitigation measures.

FINDINGS ON IMPAIRMENT FOR CULTURAL LANDSCAPES

The selected alternative will have short- and long-term, moderate, adverse impacts to Bonnie Clare Road Historic Property and minor to moderate adverse impacts to Death Valley Scotty Historic District.

The Bonnie Clare Road Historic Property was determined eligible for listing in the National Register of Historic Places in 2012. The park provided a copy of a draft cultural landscape study that included a determination of eligibility to the California SHPO on July 1, 2011, with a request for concurrence. The selected alternative will adversely affect 7 of the 13 character-defining features of the road, resulting in a moderate adverse impact to the Bonnie Clare Road Historic Property.

The Death Valley Scotty Historic District was listed in the National Register of Historic Places in 1978 and is an important cultural resource at Death Valley National Park. The historic district is immediately adjacent to Bonnie Clare Road. The features to the historic district that will be directly impacted by the selected alternative are Indian Camp and the historic fence. There will be negligible impacts to the stream, entrance gate, road, and Cottonwood Corner.

There are 5.4 miles of historic fence around Scotty's Castle with 2.6 miles of fence paralleling Bonnie Clare Road. Sixty-five percent of the concrete fence posts along Bonnie Clare Road will be relocated a minimum of 7 feet from the edge of the new road pavement, leaving the remaining 3.19 miles of fence around Scotty's Castle and the 6.0 miles of historic fenceline around Lower Vine Ranch intact. The fence will be rehabilitated in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 2012a) and its standards and guidelines for reconstruction of historic properties. Reconstruction of the fence will have a minor to moderate adverse impact on the historic fenceline.

Bonnie Clare Road currently bisects Indian Camp (site CA-INY- 5702/H). Previous road construction and maintenance projects in the vicinity of Indian Camp likely have previously affected archeological deposits next to and below the road as it bisects the site. In order to minimize impacts to Indian Camp, the construction limits for the road as it bisects Indian Camp will be limited to the

existing vertical and horizontal road footprint. The road will be widened approximately 2.0 feet to the north onto previously disturbed areas by placing fill over the top of the existing disturbed ground surface. The selected design minimizes adverse effects to Indian Camp by limiting the vertical and horizontal disturbance to previously disturbed areas. However, there is a possibility that intact deposits exist under the road surface, which will be removed as part of the project. As a result, the project will have a minor to moderate adverse impact on the Indian Camp archeological site (CA-INY-05702H).

Two turnouts and a parking lot on the Indian Camp archeological site will be eliminated. Removal of the overflow parking area will eliminate additional impacts to the portion of Indian Camp that is in the area, further reducing future impacts to the site.

In accordance with 36 CFR 800, the National Park Service has determined the selected alternative will have an adverse effect on the Bonnie Clare Road Historic Property and Death Valley Scotty Historic District, and has consulted with the California SHPO to develop a memorandum of agreement outlining measures to mitigate adverse effects of the selected alternative. The memorandum of agreement was signed by the California SHPO on June 11, 2012, and stipulates that the park will mitigate adverse effects to Bonnie Clare Road Historic Property through preparation of a Historic American Landscape Survey to document the Bonnie Clare Road Historic Property and surrounding landscape. The Timbisha Shoshone tribal chairman signed the memorandum of agreement as a concurring party on June 12, 2012.

The memorandum of agreement also requires the National Park Service to mitigate adverse effects to Death Valley Scotty Historic District by developing a plan to preserve, rehabilitate, restore, and/or reconstruct the affected historic fence and develop a fenceline treatment plan. In addition, the memorandum of agreement stipulates that the park will avoid impacts at Indian Camp archeological site through contract language requiring the construction contractor to attend pre-construction meetings with National Park Service staff and/or Timbisha Shoshone representatives to review an archeological site protection and avoidance measures plan that will be implemented prior to initiating construction activities, which will include a plan of action for inadvertent archeological discoveries during construction.

The selected alternative will not result in impairment because stipulations in the memorandum of agreement will mitigate impacts of the selected action on the Bonnie Clare Road Historic Property and Death Valley Scotty Historic District.

FINDINGS ON IMPAIRMENT FOR HISTORIC STRUCTURES

The selected alternative will have short- and long-term, negligible to minor, adverse impacts to Grapevine Developed Area Historic District, which has recently been determined eligible (2012) for the national register for its association with the park during the NPS Mission 66 program. The ranger station and parking lot are contributing components of the district.

The south end of the parking lot will be raised and new sidewalks, curbs, and gutters will be installed as part of the project. The *Secretary of the Interior's Standards for Rehabilitation* will be used to match the materials for the new sidewalk, ramp, and curbing in color and design. The work will remain within the existing footprint. The elevation of the parking lot in comparison to the building will be almost imperceptible. Therefore, there will be no adverse effect to the Grapevine Developed Area Historic District.

In accordance with 36 CFR 800, the National Park Service has determined the selected alternative will have no adverse effect to the Grapevine Developed Area Historic District.

The selected alternative will not result in impairment because the impacts to the property are negligible to minor and adverse and there will be no adverse effect to the property in accordance with 36 CFR 800.

APPENDIX B

**MEMORANDUM OF AGREEMENT
BETWEEN
THE NATIONAL PARK SERVICE (U.S. DEPARTMENT OF THE INTERIOR)
AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING
REHABILITATION OF BONNIE CLARE ROAD, MP 0.0 TO MP 7.7
DEATH VALLEY NATIONAL PARK, INYO COUNTY, CALIFORNIA**

WHEREAS, the U.S. Department of the Interior, National Park Service (NPS) proposes the following Undertaking, as defined in 36 CFR 800.16(y):

- Reconstruct and resurface approximately 7.7 miles of Bonnie Clare Road beginning at the northeastern park boundary of Death Valley National Park and the California/Nevada border (MP 0.0, end of Nevada State Route [SR]267), past the Scotty's Castle parking area (MP 4.0), across Cottonwood Wash (MP 5.0), proceeding southwest the length of Grapevine Canyon to the junction of Ubehebe Crater Road intersection (MP 7.4) and approximately 100 feet past the Grapevine Ranger Station to tie in with the recently completed reconstruction of Bonnie Clare Road from milepost 7.7 to milepost 4, and,
- Formalize and pave the Bonnie Clare Road turnout at the park boundary entrance sign near the California/Nevada border, and,
- Remove and reconstruct 85% of the existing fence of Death Valley Scotty Historic District along the Bonnie Clare Road, and,
- Resurface and make accessibility improvements to the parking lot and sidewalks at the Grapevine Ranger Station, and,
- Rehabilitate the 1.9-mile Mesquite Campground Road, and;

WHEREAS, the NPS has determined that the Undertaking will affect the following historic properties that are listed or eligible for listing in the National Register of Historic Places (NRHP):

- Bonnie Clare Road is eligible under Criteria A and C on a local level for its association with the early National Park Service Mission 66 improvement program.
- Grapevine Canyon Archeological District is eligible on a local level under criterion A for its association with Native American ethnic heritage and transportation. The District is also eligible on a local level under criterion D for the pre-contact and historic archeological information it contains and is likely to yield regarding native economics, industry, and social history.
- Scotty's Castle / Death Valley Scotty Historic District is listed in the NRHP under Criterion B at a regional level for its association with Walter Scott, and, under Criterion C at a local level for its Spanish-style architecture.
 - Scotty's Castle Fence, Indian Camp, Scotty's Castle Entrance, Cottonwood Corner (contributors)
- Grapevine Developed Area Historic District is eligible under A and C for its association with the National Park Service Mission 66 improvement program.
- Mesquite Spring Campground and Road (not previously evaluated; will be treated as eligible under Criteria A and C on a local level for its association with the early National Park Service Mission 66 improvement program.)
- CA-INY-4851H, CA-INY-4822, CA-INY-4734H, CA-INY-4852H (not previously evaluated; will be treated as eligible under Criteria D), and;

WHEREAS, the NPS consulted with the California State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP) and the Timbisha Shoshone Tribe (Tribe), pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the NHPA (16 USC Section 470f) as amended, regarding the Undertaking's effects on historic properties, and has notified the ACHP of the adverse effect finding pursuant to 36 CFR § 800.6(a)(1); and;

WHEREAS, the NPS notified the Advisory Council on Historic Preservation (ACHP) of the consultations to develop this MOA pursuant to 36 CFR 800.14(b)(i) by letter dated January 23, 2012, and;

WHEREAS, the ACHP responded to the NPS by email dated March 27, 2012, in accordance with 36 CFR 800.11(e), and requested additional information regarding the summation of comments received from the Tribe, the SHPO, and the public regarding the project. The NPS is currently responding to the ACHP's request, and;

WHEREAS, members of the public have been invited to comment on the Undertaking through the Draft Environmental Assessment (DEA) process as required by the National Environmental Policy Act (NEPA). The DEA public comment period concluded in March, 2012; and;

WHEREAS, the NPS has thoroughly considered alternatives to the Undertaking, have determined that operational constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to the historic properties during the Undertaking's implementation, and have further determined that they will resolve adverse effects of the Undertaking on the subject historic properties through the execution and implementation of this MOA; and

WHEREAS, the NPS and SHPO are entering into this MOA because the Undertaking will have an adverse effect on historic properties as defined in 36 CFR 800.5, specifically to the Bonnie Clare Road, Grapevine Canyon Archeological District, and Death Valley Scotty Historic District, and;

NOW, THEREFORE, the NPS and SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties, and further agree that these stipulations will govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

The NPS shall ensure that the following measures are carried out:

I. Definitions

The definitions provided at 36 CFR § 800.16 are applicable throughout this MOA.

II. Consultation with the Timbisha Shoshone Tribe

- A. The NPS shall continue to consult with the SHPO and the Tribe throughout the Section 106 review regarding any activity that might affect historic properties. Such consultation shall be conducted in the following manner:
 1. Initial consultation by telephone followed by written confirmation.
 2. Written correspondence documenting the consultation process for the administrative record.

3. Face-to-face consultation meetings for obtaining advice or opinions.

B. The NPS, SHPO and the Tribe shall consult in good faith and in the manner defined in Executive Order 13175, Executive Order 13007, and in accordance with this MOA.

III. Consultation with the Californian SHPO

A. The NPS initiated consultation with the SHPO via letter October 29, 2010. The NPS shall continue to consult with the SHPO as described in Stipulation III.B. regarding the eligibility of the Historic District and has submitted the draft NRHP nomination for the Historic District to the SHPO for review and concurrence.

B. The NPS shall submit design development drawings (95%) and the construction documents (100%) for rehabilitation of Bonnie Clare Road to the consulting parties for review and comment. Consulting parties shall have 30 calendar days from the date of receipt to provide comments to the NPS. If the consulting parties fail to respond within this time, NPS shall assume the consulting parties have no comments and will proceed to the next step in the design/construction process. All changes, previous comments, and agreements shall be reflected in the drawings and documents prior to advertising the project contract.

IV. Completion of Documentation Related to Historic Property Identification within the APE

In the course of the Section 106 consultation for this Undertaking the SHPO agreed that the NPS carried out identification and evaluation of historic properties within the APE sufficiently to assess effects to historic properties and execute this MOA. However, SHPO did request that NPS carry out additional tasks to certain aspects of the technical documentation of the historic properties identified to optimize their usefulness as resource records of the State of California. SHPO will provide written comments to NPS concerning these additional documentation tasks, and NPS will complete the documentation within one year of receipt of these comments from SHPO.

V. Treatment of Historic Properties

A. Bonnie Clare Road Historic Property

1. NPS shall ensure that both Bonnie Clare Road and the surrounding landscape within the entire historic property boundary, as defined in the consensus Determination of Eligibility (DOE), shall be the subject of recordation by the Historic American Landscape Survey (HALS) prior to the start of construction of the Undertaking.

2. NPS shall consult with the SHPO and with the NPS Pacific West Region Heritage Documentation Program to establish the scope, specifications, and all other issues pertinent to such recordation.

B. Grapevine Canyon Archeological District

To mitigate the adverse effect from the Undertaking, the NPS shall revise the District DOE in consultation with the SHPO and the Tribe and then nominate the District for listing in the NRHP, within 5 years from the date of this MOA's execution or until this project is complete, whichever is shorter.

C. Death Valley Scotty Historic District Including the Historic Concrete Post Fence

1. To mitigate adverse effects to the historic fence at Scotty's Castle and by extension the effect to Death Valley Scotty Historic District resulting from the Undertaking, the NPS shall create a Preservation/Rehabilitation Treatment Plan that shall include

documentation that supports methods/approaches for the rehabilitation, long term maintenance, repair, and/or replacement of fenceline components. This preservation/rehabilitation treatment plan shall be implemented during construction.

2. To mitigate adverse effects to the historic fence at Scotty's Castle and by extension the effect to Death Valley Scotty Historic District resulting from the Undertaking, the NPS shall rehabilitate the historic concrete post and wire fenceline adjacent to the current project boundary in accordance with the Fence Preservation Treatment Plan (Attachment C) and with the Secretary of the Interior's Standards for Rehabilitation of Historic Structures. This Fence Preservation Treatment Plan shall be implemented during construction.

VI. Professional Qualifications and Standards

- A. All historic preservation activities implemented pursuant to this MOA shall be carried out by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's Professional Qualifications Standards (48 FR 44738-39) for the discipline appropriate to the historic property in question.
- B. Any inventory or documentation of historic properties pursuant to implementation of the MOA shall conform to the provisions of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR. 44716-44740) and applicable standards and guidelines for historic preservation established by the SHPO.
- C. Curation of materials and records resulting from actions stipulated by this MOA shall be curated in accordance with 36 CFR Part 79. Such materials and records shall be curated by the NPS to the extent permitted by sections 5097.98 and 5097.991 of the California Public Resources Code.
- D. The signatories to this MOA acknowledge that historic properties covered by this MOA are subject to the provisions of section 304 of the NHPA and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archeological site information and, having so acknowledged, shall ensure that all actions and documentation prescribed by this MOA are consistent with said sections.

VII. Area of Potential Effect (APE)

The NPS determined and the SHPO concurs that the APE for the Undertaking includes any area where there may be ground disturbing, demolition or construction activities including all areas within the temporary and permanent right-of-way required for the project and all areas within the "clearing limits" as indicated on the road plans. In addition the APE includes areas not impacted directly by construction related activities but may be visually or audibly impacted or that may be impacted by an "off-site" construction related activity (e.g. construction of wetland mitigation area or borrow areas). Indirect effects can be temporary (e.g. construction related noise) or permanent (e.g. changing the view shed). See attachment A to this MOA for maps of the APE.

VIII. Archeological Resources

- A. The NPS shall avoid or minimize potential adverse impacts to Indian Camp and other archeological resources through contract language requiring the construction contractor to attend pre-construction meetings with park archeologists and other appropriate NPS personnel and consulting parties as identified by the park. During these meetings, the park personnel and

contractor shall develop archeological site protection and avoidance measures that would be implemented prior to initiating construction activities. These measures will include, but are not limited to, fencing, monitoring, and designating environmentally sensitive areas.

- B. To potential adverse impacts to archeological resources the NPS shall also develop an Archeological Treatment Plan (Attachment B) that includes provisions for inadvertent archeological discoveries and monitoring during construction. The plan shall outline which locations would undergo archeological monitoring during construction and who shall perform the monitoring (e.g., park archeologist, Tribal monitors, etc.). The plan shall also outline the procedures to be taken if an inadvertent discovery is made by the construction contractor or the monitors.

IX. Relationship to Other Existing Agreements and Acts

This MOA shall not be construed to supersede or contravene the provisions of the following: Timbisha Shoshone Homeland Act (2000); Archaeological Resources Protection Act (1979), as amended; Native American Graves Protection and Repatriation Act (1990); American Indian Religious Freedom Act (1978); California Desert Protection Act (1994).

X. Dispute Resolution

- A. The signatories agree that this MOA shall guide the implementation of the Undertaking for addressing its effects to and treatment of historic properties until this MOA expires or is terminated. Should any of the signatories of this MOA at any time object in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of this MOA, or to any document prepared in accordance with and subject to the terms of this MOA, the objecting party shall notify the other signatories of this MOA. The signatories shall consult for 30 days from receipt of the notice of objection to promptly resolve the objection.
- B. If the objection is resolved through consultation, the NPS shall notify the other signatories of the terms of the resolution, and the NPS may proceed in accordance with the terms of such resolution.
- C. If after initiating consultation, the NPS determines that the objection cannot be resolved through consultation, or if the duration of the consultation has exceeded 30 days from the commencement of consultation to resolve the dispute, the NPS shall forward all documentation relevant to the objection to the ACHP, including the NPS's proposed resolution of the objection, with the expectation that the ACHP will within 30 days after receipt of such documentation:
 - 1. Advise the NPS that the ACHP concurs in the NPS's proposed resolution of the objection, whereupon the NPS shall notify the other signatories, and NPS shall resolve the objection accordingly; or
 - 2. Provide the NPS with recommendations, which the NPS shall take into account in reaching a final decision to resolve the objection. The NPS shall notify all the signatories and the ACHP of its final decision. If the ACHP or any of the signatories object to the final decision, the objecting party shall notify the other signatories and the ACHP, and the ACHP shall follow the procedures at 36 CFR 800.7(c).
- D. The procedures outlined in Stipulations XIII.A to XIII.C, above, shall apply only to the subject of the objection. The NPS's responsibility to carry out all actions under this MOA that are not

the subjects of the objection, and which do not foreclose the consideration of alternatives to resolve the objection, shall remain unchanged.

- E. At any time during implementation of the terms of this MOA, should a member of the public object to the manner of such implementation, the NPS shall consult with the objecting party and, if the objecting party so requests, with the other parties to this PA, for no more than 30 days. Within 30 days following closure of this consultation period, NPS will render a decision regarding the objection and notify the other parties of its decision in writing. In reaching its decision, NPS will take all comments from the other parties into consideration. NPS's decision regarding resolution of the objection will be final.

XI. Amendments

The NPS or SHPO may propose that this MOA be amended, whereupon the NPS and SHPO shall consult to consider such amendment. This MOA may be amended only upon the written agreement of the NPS and SHPO. The amended MOA shall take effect on the date that it was executed by the NPS and the SHPO.

XII. Termination

- A. If the NPS or SHPO propose termination of this MOA, the party proposing termination shall, in writing, notify the other, explain the reasons for proposing termination, and consult for 30 days to seek alternatives to termination.
- B. Should such consultation fail, the party proposing termination may terminate this MOA by promptly notifying in writing the other. Termination hereunder shall render this MOA without further force or effect.
- C. Should this MOA be terminated, the NPS shall consult in accordance with 36 CFR 800.6(b).

XIII. Duration

Unless terminated pursuant to Stipulation XIII, the duration of this MOA is five years from the date of its execution or until the mitigation measures are complete, whichever is shorter. If necessary, NPS shall initiate consultation with SHPO approximately one year prior to the expiration of this MOA to reconsider its terms. Reconsideration may include the continuation or revision of this MOA by amendment or termination.

XIV. Effective Date

The NPS will ensure that each party is provided with a copy of the fully executed MOA. This MOA will take effect on the date that it has been signed by the SHPO.

XV. Concurring Party Involvement in Implementation of this MOA

- A. No work stipulated per this MOA involving concurring parties shall proceed until forty-five (45) calendar days after the execution of this MOA by the required signatories.
- B. If a consulting party does not sign this MOA as a concurring party within forty-five (45) calendar days after the execution of this MOA by the required signatories, the NPS may proceed with work stipulated per this MOA involving concurring parties.
- C. A consulting party can become a concurring party after the forty-five (45) calendar-day period with the written agreement of all signatory parties.

- D. If a consulting party becomes a concurring party to the MOA after forty-five (45) calendar days after the execution of the MOA subject to stipulation XVI(C) above, the NPS shall not be required to revisit prior completed consultations stipulated in this MOA or reconsider previous findings or determination made prior to the date that such consulting party became a concurring party.

XVI. Anti-Deficiency Act

Any requirement for the payment or obligation of funds by the Government established by the terms of this MOA shall be subject to availability of appropriated funds. No provision of this MOA shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 USC Section 1341. If the availability of funds and compliance with the Anti-Deficiency Act impair the NPS' ability to perform under this MOA, then the NPS shall consult in accordance with Stipulation IX of this MOA.

Execution and implementation of this MOA by the signatory parties, and implementation of its terms, shall evidence that NPS has afforded the ACHP a reasonable opportunity to comment on the Undertaking and the effect of the Undertaking on historic properties, and that the NPS has taken into account the effects of the Undertaking on historic properties.

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

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calshpo@parks.ca.gov
www.ohp.parks.ca.gov



June 11, 2012

In reply refer to: NPS101101A

Sarah Craighead, Superintendent
National Park Service
Death Valley National Park
P.O. Box 579
Death Valley, CA 92328



Re: Bonnie Clare Road Consultation, Death Valley National Park, CA

Dear Ms. Craighead:

Enclosed, please find two copies of the signature page for the *Memorandum of Agreement Between the National Park Service (U.S. Department of the Interior) and the California State Historic Preservation Officer Regarding Rehabilitation of Bonnie Clare Road, MP 0.0 to MP 7.7, Death Valley National Park, Inyo County, California*. It now has signatures of both signatories and the concurring party and is considered executed.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you require further information, please contact Mark Beason, State Historian II, at phone 916-653-8902 or email mbeason@parks.ca.gov.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

SIGNATORIES

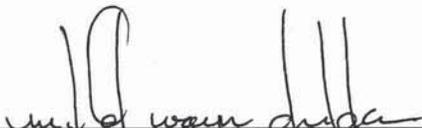
National Park Service



Sarah Craighead
Superintendent, Death Valley National Park

5/24/12
Date

California State Historic Preservation Officer



M. Wayne Donaldson, FAIA
State Historic Preservation Officer

11 JUN 2012
Date

CONCURRING PARTY

Timbisha Shoshone Tribe

George Gholson
Chairman

Date

Attachment A, Map of the Area of Potential Effect

Attachment B, Archeological Discovery, Monitoring, and Treatment Plan

Attachment C, Death Valley Scotty Historic District Fence Preservation Treatment Plan

SIGNATORIES

National Park Service



Sarah Craighead
Superintendent, Death Valley National Park

5/24/2012
Date

California State Historic Preservation Officer

M. Wayne Donaldson, FAIA
State Historic Preservation Officer

Date

CONCURRING PARTY

Timbisha Shoshone Tribe



George Gholson
Chairman

6-12-12
Date

Attachment A, Map of the Area of Potential Effect

Attachment B, Archeological Discovery, Monitoring, and Treatment Plan

Attachment C, Death Valley Scotty Historic District Fence Preservation Treatment Plan