DUKE CRM

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July 14, 2023

Tim Kander
Ritchie Bros.
4000 Pine Lake Road
Lincoln, NE 68516

Subject: Cultural and Paleontological Resources Assessment for the Project Located at 34550 Outer Highway 15, County of San Bernardino, California (C-0487)

Dear Mr. Kander:

At the request of Ritchie Bros. (CLIENT), Duke Cultural Resources Management, LLC (DUKE CRM) has prepared a cultural and paleontological resources assessment for the Project located at 34550 Outer Highway 15 (Project) in unincorporated San Bernardino County, California (see Attachment A, Map 1: Project Vicinity). The County of San Bernardino (COUNTY) is the lead agency for the California Environmental Quality Act (CEQA). The purpose of this letter report is to document compliance with CEQA and to provide information to allow the COUNTY to determine whether the proposed Project would cause substantial impacts to archaeological, historical, or paleontological resources.

The Project is located within Section 5, Township 9 North, Range 1 East, as depicted on the *Nebo, Calif.* USGS 7.5-minute quadrangle (see Attachment A, Map 2: Project Location). It is located at 34550 Outer Highway 15, north of Outer Highway 15, west of Ghost Town Road, and east of Fort Irwin Road within APN 0516-101-01 in the unincorporated community of Yermo, approximately 8 miles northeast of the city of Barstow (see Attachment A, Map 3: Project Aerial Photo). The Project is approximately 53 acres in size, and it will involve an increase in storage of military surplus equipment. The project does not propose any new construction or ground disturbance.

The cultural and paleontological records searches and field survey were conducted by Alexandria Bulato, B.A. Ms. Bulato is the Archaeologist assigned to the Project for DUKE CRM and is the primary author of this report. Ms. Bulato has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, report preparation, and construction monitoring) since 2016, and she holds a B.A. in Anthropology from California State University (CSU) San Bernardino. The report was reviewed by Brian Glenn, M.A., RPA, and Brian Kussman, B.A. Mr. Glenn has over 35 years of experience working in all phases of archaeology, and he holds an M.A. in Archaeology from the University of California at Los Angeles. Mr. Kussman has over 30 years of experience working in all phases of paleontology (paleontological research, field survey, fossil salvage, fossil preparation, laboratory identification, report preparation, curation, and construction monitoring), and he holds a B.A. in Earth Sciences from CSU Fullerton. All work was conducted under the direct supervision of Curt Duke, M.A., RPA. Mr. Duke is the Principal Archaeologist of DUKE CRM and meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology. Mr. Duke holds an M.A. in Anthropology from CSU Fullerton, and he has worked in all phases of archaeology since 1994.

Research

On May 26, 2023, DUKE CRM requested that the San Bernardino County Museum (SBCM) in Redlands, California perform a paleontological records search for known fossil localities within and in the vicinity of the Project. The SBCM responded on July 6, 2023 indicating that two (2) fossil localities are documented within a one-mile radius of the Project; no fossil localities were documented within the Project area. The nearest locality,

SBCM 1.110.113, is approximately 0.85 miles from the Project. This locality consists of fragmentary bones of genus *Lepus* collected from several feet below surface within either *Qa* or older *Qoa* alluvial sands. The other locality, SBCM 1.110.112, is less than 200 feet southeast of SBCM 1.110.113 and consists of fragmentary bones of genus *Equus* collected from within either *Qa* or older *Qoa* fine-grained alluvial sands at unknown depth.

The geology within the Project has been mapped by Dibblee and Minch (2008) and Phelps et al. (2012). This geologic mapping indicates that the Project is underlain by surficial Holocene and Pleistocene-age alluvial deposits (*Qya/Qa*), the older of which consists of unconsolidated light gray sand of variable grain size. *Qa* sediments are considered to have moderate paleontological sensitivity as they sometimes contain subfossils and generally overly older Pleistocene-age alluvial units (*Qoa)* that have produced fossils throughout San Bernardino County.

On June 8, 2023, DUKE CRM conducted a records search at the South Central Coastal Information Center (SCCIC). The SCCIC is part of the California Historical Resources Information System (CHRIS) and is located at California State University, Fullerton. The records search included a review of recorded cultural resources and reports within a ½-mile radius of the Project.

No cultural resources have been recorded within the Project area or within a ½-mile radius of the Project. The closest previously documented cultural resource is located approximately 1.8 miles southeast of the Project, within the boundary of Fort Irwin. This resource, P-36-000073, is a rock art site known as Rattlesnake Rock that contains a large number of petroglyphs throughout an outcropping of igneous rock. The site was originally recorded in 1939, and surveys in 1939 and 1949 documented artifacts including *Olivella* shell beads, lithic debris, ground stone tools, and ceramic sherds surrounding the outcropping. However, excavation of 36 shovel test pits at the site in 1996 recovered only three (3) small unmodified chert flakes. The site is noted as having been heavily disturbed by blasting of the rock and by modern graffiti inscribed over the prehistoric petroglyphs, and protective chain-link fencing was installed around the site by the United States Marine Corps some time prior to 1996. P-36-000073 is listed as a California Point of Historical Interest (CPHI).

SCCIC records indicate that a total of six (6) cultural resource reports cover areas within ½ mile of the Project (Table 1). Of these, one (1) study was conducted adjacent to the western boundary of the Project. This study, SB-02257, was a field survey that did not record any cultural resources within ½-mile of the Project. Of the other five (5) studies, one (1) was a linear study conducted for improvements to the Coolwater-Kramer 220 kV Transmission Line, three (3) were linear studies conducted for improvements to the Fort Irwin Defense Access Road, and one (1) was a study completed for a subdivision approximately 0.4 miles north of the Project. None of these studies documented cultural resources within ½-mile of the Project boundary.

Table 1: Cultural Resource Studies within ½ mile of the Project

Report No.	Year	Report Title	Authors	Sites within the Project area
SB-00125	1972	Environmental Report: Coolwater-Kramer 220 kV Transmission Line.	Southern California Edison	None
SB-01168	1981	Cultural Resources Assessment of the Fort Irwin Defense Access Road, Lead Mountain Alternative, San Bernardino County.	Lerch, Michael K.	None
SB-01208	1981	Cultural Resources Assessment of the Fort Irwin Defense Access Road, Phase 2, San Bernardino County, California.	Lerch, Michael K.	None
SB-01209	1982	Cultural Resources Assessment of the Fort Irwin Defense Access Road, Phase 3, From Meridian Road to Irwin Road, San Bernardino County, California.	Lerch, Michael K.	None

Report No.	Year	Report Title	Authors	Sites within the Project area
SB-01714	1987	Minor Subdivision 07/14/87-1B (Sweeny)	Kaldenberg, Russell	None
SB-02257	1978	Archaeological Sites of the California Desert Area (Calico, Kramer, Stoddard, Johnson, Morongo, Twentynine Palms) Transect Forms.	Bureau of Land Management	None

In addition, the California Built Environment Resources Directory (BERD) was examined, which includes the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), and CHPI. The BERD did not identify any cultural resources within the Project area.

Based on a map depicting ethnographically known Native American villages using accounts of Franciscan missionary explorer Francisco Garcés, the nearest village to the Project was an unnamed Serrano village thought to be located along the Mojave River just south of the historical location of Camp Cady, approximately 10 miles east of the Project. The nearest named Serrano village to the Project, *Timinja*, was also thought to be located along the river, approximately 13 miles southeast of the Project in present-day Newberry Springs.

Additionally, a review of historical aerial photographs and historical topographic maps was conducted using the University of California, Santa Barbara's online *FrameFinder* program and the USGS Historical Topographic Map Explorer. A 1940 historical aerial photograph depicts an improved road adjacent to the southern Project boundary following the current alignment of Outer Highway 15/Yermo Road and an unimproved road adjacent to the western Project boundary following the current alignment of the Old Yermo Cutoff, but it depicts no additional development within or surrounding the Project area. The 1953 *Nebo, Calif.* 1:24,000 historical topographic map depicts Outer Highway 15/Yermo Road adjacent to the southern Project boundary (labeled as State Route 91/466), but it shows no additional development within or surrounding the Project. A historical aerial photograph from 1959 does not show any changes to the Project area. A historical aerial photograph from 1973 shows that Interstate 15 had by that time been constructed along its current alignment immediately south of Outer Highway 15/Yermo Road, but the photograph depicts no other development within the Project. A historical aerial photograph from 1989 shows that the southwestern portion of the existing Project property had been developed by that time.

A request for a Sacred Lands File (SLF) search was submitted to the Native American Heritage Commission (NAHC) by DUKE CRM on May 26, 2023 to ascertain the presence of known sacred sites, Native American cultural resources, and/or human remains within the boundaries of the proposed Project and the surrounding area. The NAHC responded on June 21, 2023, and stated that the results of the SLF search were negative, indicating that there are no known sacred sites within or adjacent to the Project.

Field Survey

DUKE CRM archaeologist Alexandria Bulato, B.A., conducted an intensive pedestrian survey of the Project area on June 20, 2023. Ms. Bulato is cross-trained in the identification of both archaeological and paleontological resources. All open space within the approximately 53-acre Project boundary was intensively surveyed using transects spaced no more than 15 meters apart (see Attachment A, Map 3: Project Aerial); survey was constrained to areas where vehicles were not parked at the time of the site visit. There is little to no vegetation within the Project area, and ground visibility was excellent (90 to 100 percent) throughout the Project; the only limitations to survey and to ground visibility were due to parked vehicles throughout the Project area. Sediments throughout the Project appeared disturbed by grading, vehicular traffic, and wind displacement, and sediments along the northern and eastern Project boundaries appeared disturbed by recent flooding. Photographs depicting survey coverage are provided in Attachment B. No cultural or paleontological resources were observed during the field survey.

Conclusions

DUKE CRM assessed the proposed Project for potentially significant impacts to cultural and paleontological resources under CEQA. Research suggests that the Project consists of surficial Holocene- and Pleistocene-age alluvium (*Qya*/*Qa*) underlain by older Pleistocene-age alluvium (*Qoa*), the latter of which can be considered to have a moderate sensitivity for paleontological resources. However, the Project will not involve ground disturbance and therefore do not have the potential to impact older *Qoa* sediments. Research identified two (2) fossil localities within one mile of the Project boundary, but the field survey did not identify any paleontological resources within the Project and assessed the Project area as being moderately to heavily disturbed by prior construction, vehicular traffic, and environmental agents. Based on these factors, the Project area is assessed as having a low opportunity for impacting paleontological resources, and no further paleontological investigation is warranted.

No cultural resources are recorded within the Project area, and the pedestrian survey did not identify any prehistoric or historical cultural resources. No cultural resources are recorded within ½-mile of the Project, and the closest previously documented resource, P-36-000073, is located 1.8 miles from the Project. The Project is located approximately two (2) miles from the Mojave River, and the closest ethnographically known prehistoric Serrano village is located along the river approximately 10 miles from the Project. Based on these factors and on the level of prior disturbance within the Project boundary, the Project area is assessed as having a low sensitivity for prehistoric and historic cultural resources. Based on this assessment and due to the fact that no ground disturbance will be taking place in association with the Project, no further archaeological investigation is warranted.

If previously unidentified cultural or paleontological materials are unearthed during construction, work shall be halted in that area until the qualified archaeologist can assess the significance of the find. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has determined the origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

DUKE CRM appreciates the opportunity to provide cultural and paleontological services in support of this project. If you have any questions or comments, please feel free to contact me at (909) 684-2713 or alexbulato@dukecrm.com.

Sincerely,

DUKE CULTURAL RESOURCES MANAGEMENT, LLC

Alexandria Bulato, B.A.
Archaeologist/Field Director

Curt Duke, M.A. RPA
Principal Archaeologist/President

Attachments

A: Project Maps
B: Project Photographs

ATTACHMENT A

PROJECT MAPS

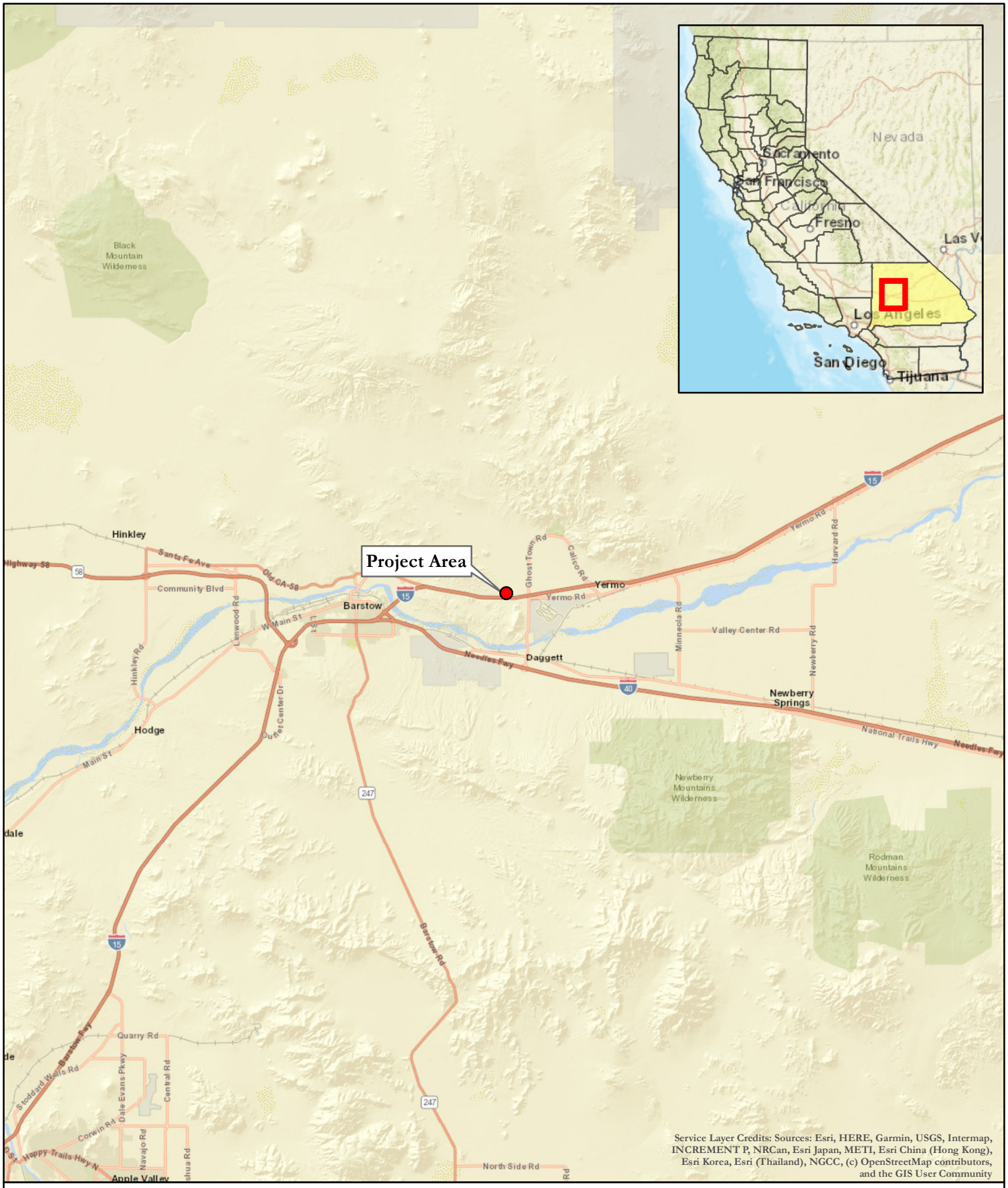

Figure 1. Project Vicinity

34550 Outer Highway 15 Yermo, C-0487

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● Project Area

0 6 12 Miles

1 inch = 6 miles 1:360,000

N

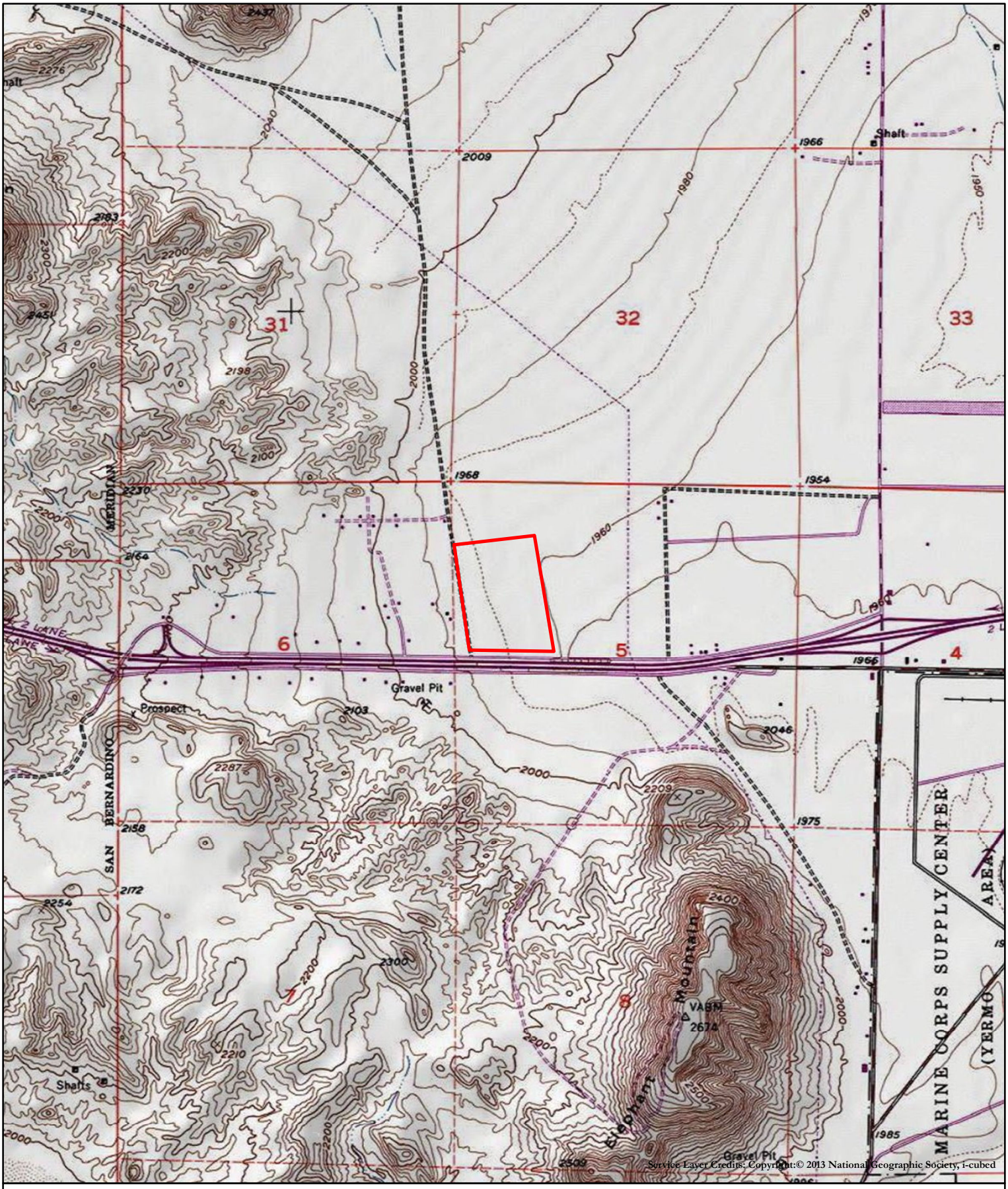

Figure 2. Project Location
34550 Outer Highway 15 Yermo, C-0487

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Nebo, Calif USGS 7.5-minute quadrangle
T9N, R1E, Section 5
Date of Map: 1953 / Photorevised: 1970

Project Area
USGS 7.5' Quads

0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
N
1 inch = 2,000 feet
1:24,000

Figure 3. Project Aerial Photo
34550 Outer Highway 15 Yermo, C-0487

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Project Area

0 250 500 Feet

1 inch =500 feet

N

1:6,000

ATTACHMENT B

PROJECT PHOTOGRAPHS

Project overview from near northeast corner, view to southwest.

Project overview from northern boundary, view to south.

Project overview from near northwest corner, view to southeast.

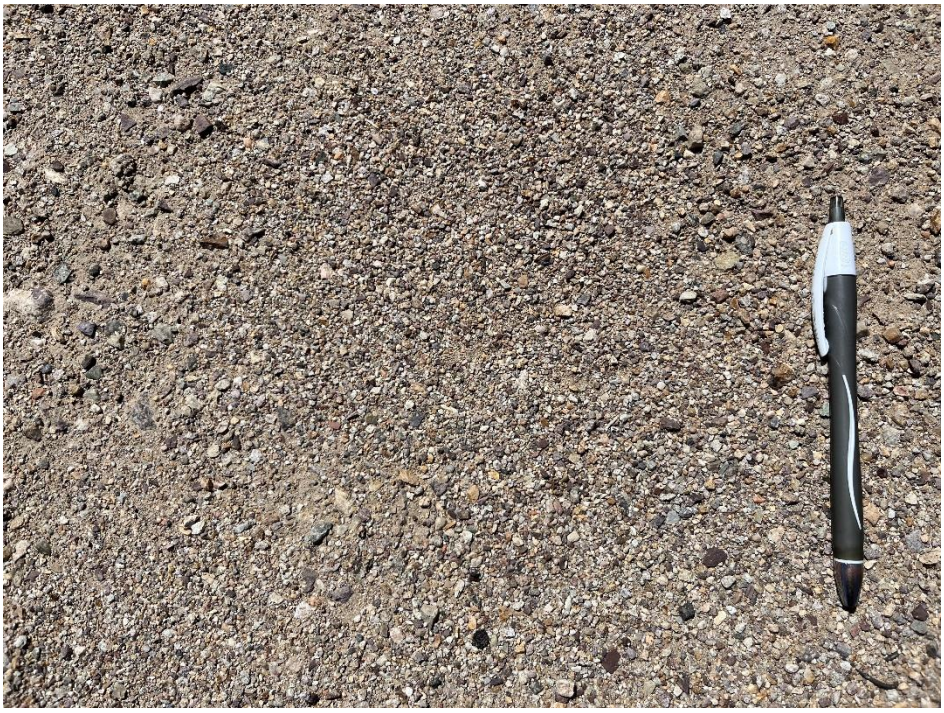
Overview of disturbance from flooding near northwest corner, view to southeast.

Project overview from near southwest corner, view to northeast.

Overview of open space within northwestern portion of Project, view to southeast.

Overview from approximate center of Project, view to west.

Overview from approximate center of Project, view to southeast.



Example of typical sediments within Project.

Example of desert pavement sediments near southwest corner of Project.

Overview of open space within eastern portion of Project, view to west.

Example of sediments disturbed by wind near center of Project.