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April 26, 2024

Danielle Ornelas
CASC Engineering & Consulting
27710 Jefferson Avenue, Suite 105
Temecula, CA 92590

Subject: Cultural and Paleontological Resources Assessment for the Proposed APN 3067-051-29 Project, Pinon Hills, San Bernardino County, California (Project Number C-0536)

Dear Ms. Ornelas:

At the request of the CASC Engineering & Consulting (CLIENT), Duke Cultural Resources Management, LLC (DUKE CRM) has prepared a cultural and paleontological resources assessment for the Proposed APN 3067-051-29 Project (Project), located in the unincorporated community of Pinon Hills, San Bernardino County, California. The Project is approximately 8.8 acres in size. San Bernardino County (County) is the lead agency for California Environmental Quality Act (CEQA) and the County Land Use Service Department has required this study to comply with the CEQA. There is no federal jurisdiction on this Project.

The Project proposes to construct a new gas station with ten (10) fuel dispensing islands and four (4) fuel dispensing islands for commercial vehicles, and a 5,637 square foot convenience store on an 8.8-acre parcel (APN: 3067-051-29). The maximum depth of disturbance is 10 feet.

The Project is located in the unincorporated community of Pinon Hills, California in San Bernardino County west of the intersection of Oasis Road and Route 138. The Project is located in Section 18, Township 4 North, Range 7 West, as shown on the United States Geological Survey (USGS) *Mescal Creek*, *Calif.* 7.5 quadrangle map (Attachment A: Maps 1. Project Vicinity, 2. Project Location & 3. Project Aerial). The Project area is a vacant 8.8-acre property. Elevations range from 4,032 feet above mean sea level (amsl) in the northwest corner to 4,074 feet amsl in the southeast corner. The Project is comprised of APN 3067-051-29.

On February 28, 2024 DUKE CRM conducted a cultural resources records search at the South Central Coastal Information Center (SCCIC). The SCCIC, located at the California State University, Fullerton, is the regional office of the California Historical Resources Information System (CHRIS) covering San Bernardino County. The records search included a review of all recorded cultural resources within a ½-mile radius of the Project, as well as a review of known cultural resource survey and excavation reports within the same search radius.

No cultural resources are recorded within the Project; however, three (3) linear resources were identified within ½-mile of the Project (Table 1). These are all early roads are illustrated on the 1903 San Antonio 15' quadrangle. Two (2) of these resources border the Project; P-36-004406 (Boneyard Canyon Road) directly adjacent to the northwest and P-36-004417 (Tejon Road South) adjacent

along the northeast Project boundary. The third resource is the P-36-004417 (Tejon Road) is approximately ¾ mile northeast of the Project area at its closest point.

According to the SCCIC, the Project area has not been previously reported. Six (6) cultural resource reports are within the ½ mile search radius, but outside the Project area. These consist of two (2) small (0 -10 acre) surveys and four (4) separate linear investigations of California State Route (SR) 138.

Resource No.	Resource Type	Description	Eligibility	Distance and Direction
P-36-004406	Historic	Boneyard Canyon Road	Unknown	Adjacent-northwest
P-36-004415	Historic	Tejon Road	Unknown	0.75 miles northeast
P-36-004417	Historic	Tejon Road South	Unknown	Adjacent-northeast

In addition to the records search at the SCCIC, Brian Glenn, M.A., RPA, Principal Investigator at DUKE CRM conducted a review of on-line historical aerial photographs and historic USGS quad maps utilizing the University of California, Santa Barbara (UCSB) FrameFinder portal, historicaerials.com, and USGS Historical Topographic Map Explorer. The 1903 San Antonio 15' quadrangle illustrates the three (3) historic roads reported above. By 1942, the route now occupied by SR 138 is depicted as an improved Lancaster Road. Tejon Road remains with a number of offshoot roads, as well as section line roads. Review of an aerial photograph from 1952 (HistoricAerials.com 1952) illustrates Smoke Tree Road to the north and an earlier version of Oasis Road. The 1946 Mescal Creek 7.5' quadrangle shows roads focused along section roads though Tejon Road remains illustrated as a dirt road. The community road network continues to expand, and numerous single structures as illustrated by 1968 and 1988 Mescal Creek 7.5' quadrangles. SR 138 continues to be maintained with the addition of an upgraded intersection of SR 138 and Oasis Road by 2002. Based on review of maps and aerial images, the Project area has not been previously developed apart from a graded road along the northeast and eastern Project boundary.

Additionally, an inquiry to the Native American Heritage Commission (NAHC) was submitted to ascertain the presence of known sacred sites, Native American cultural resources within the boundaries of the proposed Project. On February 13, 2024, the NAHC indicated that there have been no Native American cultural resources identified within the Sacred Lands File for the Project location. The County shall pursue AB 52 consultation outreach.

DUKE CRM received the results of a paleontological resource records search conducted by the San Bernardino County Museum (SBCM), Division of Earth Science on April 19, 2024. Review of geologic mapping of the region done by Dibblee and Minch (2002) indicates the proposed project is located on Quaternary alluvial gravel and canyon flood plains of Holocene age (*Qa/Qyf*). Due to their young age (<11,700 years old) these sediments are considered low sensitivity for containing paleontological resources but have the potential to overlie high sensitivity deposits of Pleistocene age (2.5 million years ago to 11,700 years ago). Older Pleistocene (*Qoa*) deposits in the area have been found to be highly fossiliferous yielding the remains of ground sloths, bison, and horse. The nearest fossil locality is approximately five (5) miles southeast, where localities SBCM 1.103.179 through 182 yielded fossil remains of Scincidae (skink), *Sylvilagus* (rabbit), and indeterminate Chordata. In addition to the records search at the SBCM, Brian Kussman, Bachelor of Arts (B.A.), Paleontologist at DUKE CRM conducted a review of on-line and published literature on documented fossils localities in southern California. These searches did not produce any additional fossil localities within 3 miles of the Project.

DUKE CRM conducted an intensive cultural and paleontological resources pedestrian survey of the entire 8.8-acre Project area on March 15, 2024 with transects spaced no greater than 15 meters apart (see Attachment A, Aerial Map). Soil within the Project area is a 10YR 5/3 brown, medium to coarse sandy loam, with low gravel density. The surface visibility was moderate (40 - 45 percent) with the ground surface sparsely covered with indigenous desert vegetation such as Joshua tree, white bursage, juniper and California buckwheat (Attachment B: Project Photographs). The graded road parallels the northeastern and eastern Project boundary (Map 3). The Project area appears otherwise undisturbed. There were no cultural or paleontological resources observed during the field survey.

DUKE CRM evaluated the proposed Project area for impacts to cultural and paleontological resources in compliance with CEQA. The Project is considered to have a low potential to impact prehistoric cultural resources due to the fact that there are no known habitation or other sites within ½ mile and there are no permanent sources of water near the Project. Two (2) historic roads are located adjacent to but completely outside the Project area. Neither resource will be impacted as a result of the Project. Therefore, it is not likely that cultural resources will be impacted by the Project. DUKE CRM does not recommend additional work regarding cultural resources.

The Project has a low potential to impact paleontological resources within the upper 4 to 5 feet of deposits given the young age of the surface sediments (Holocene) and the lack of fossils discovered near the Project. However, the Project is estimated to disturb soils to a depth of 10 feet. As such, excavation beyond 5 feet below the surface should be monitored for paleontological resources.

Paleontological Monitoring – A paleontological monitor shall be present at the kickoff meeting to provide a summary of the paleontological sensitivity of the Project area at depths greater than five (5) feet below the surface. In addition, it is recommended that a paleontological monitor be present during excavations in excess of five (5) feet below the surface in the Project area. The monitor shall work under the direct supervision of a qualified paleontologist (minimum of a B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated experience and competence in paleontological research, fieldwork, reporting, and curation). The monitor shall be a trained paleontological monitor with experience and knowledge of sediments, geologic formations, the identification and treatment of fossil resources.

1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
2. Paleontological monitoring shall be present full-time during excavations in excess of five (5) feet below the surface. If no paleontological resources are discovered after half of the ground disturbance has occurred, monitoring can be reduced to part-time or spot-checking.
3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered.
4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed, and the area cleared.
6. If the discovery is significant the qualified paleontologist shall notify the developer and County of San Bernardino immediately.

7. In consultation with the applicant and the County, the qualified paleontologist shall develop a plan of mitigation which will likely include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

If previously unidentified cultural or paleontological materials are unearthed during Project development, work shall be halted in that area until a qualified archaeologist or paleontologist 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 made a determination of 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 complete 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.

Thank you for contacting DUKE CRM on this Project. If you have any questions or comments, you can contact me at (714) 345-9883, or by e-mail at BrianGlenn@dukecrm.com.

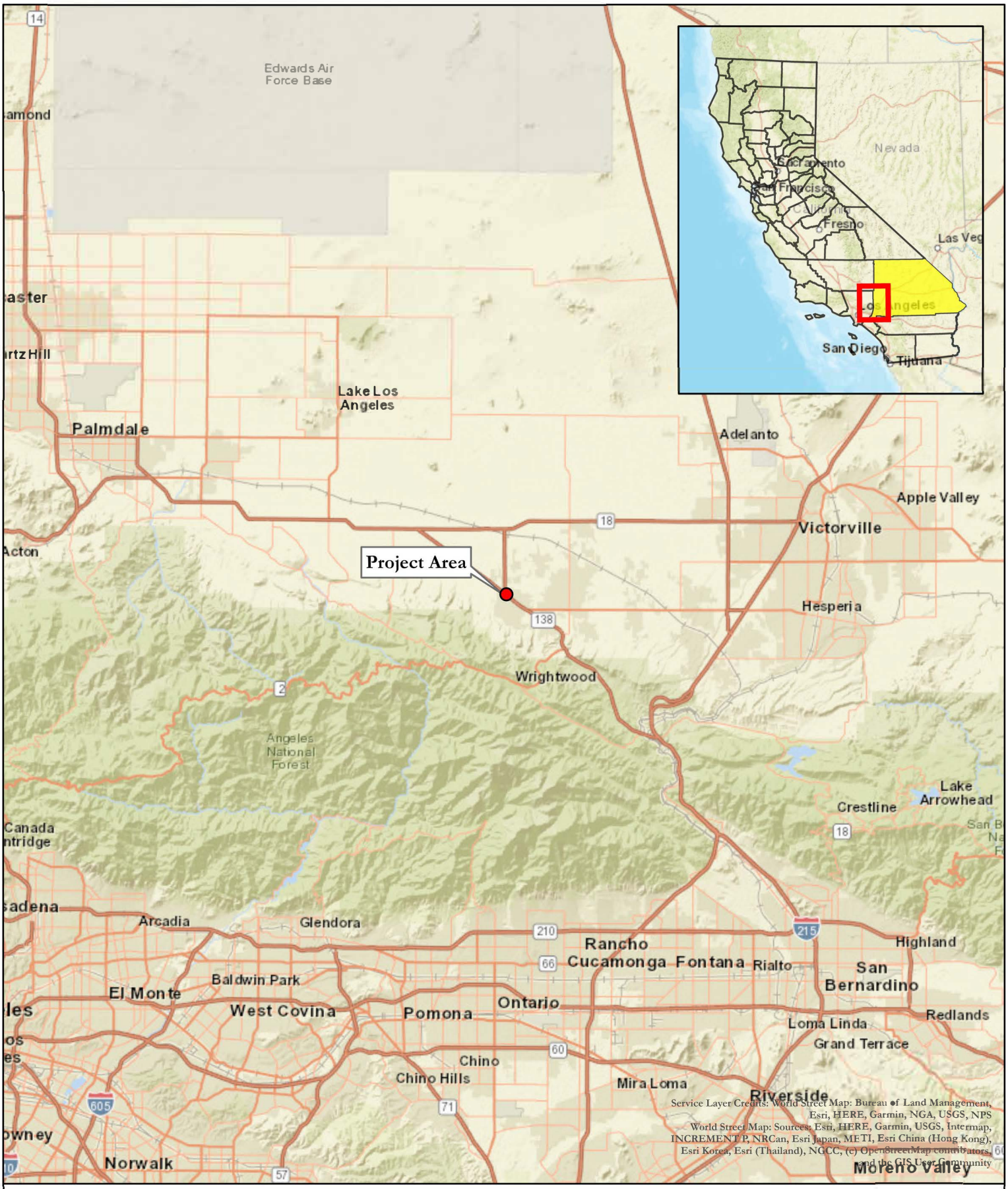
Sincerely,
DUKE CULTURAL RESOURCES MANAGEMENT, LLC

Brian Glenn, M.A., RPA
Principal Investigator

Attachments
A: Project Maps
B: Project Photographs

ATTACHMENT A

PROJECT MAPS



Map 1. Project Vicinity

Oasis Rd & Highway 138 Pinon Hills (C-0536)

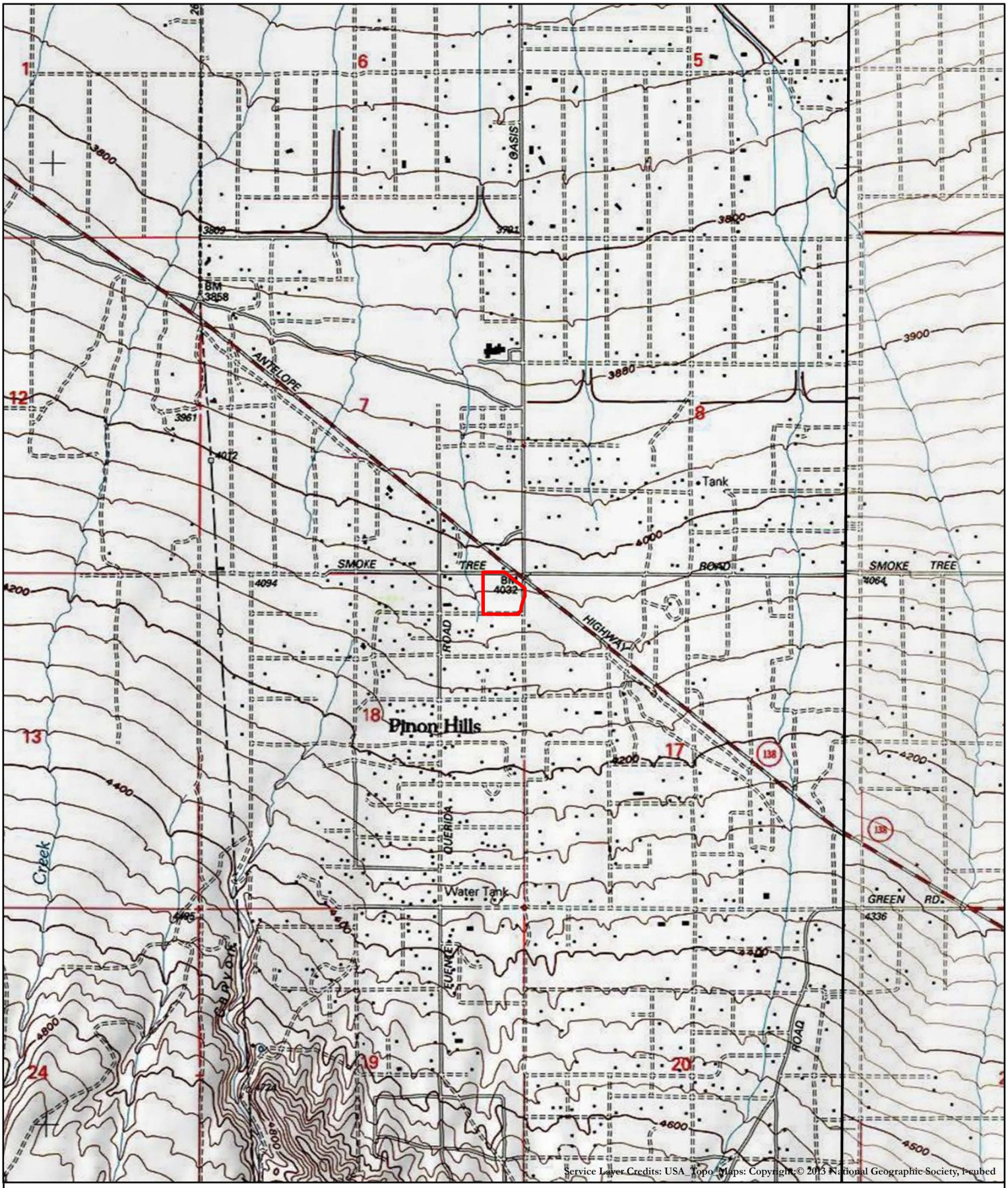
DUKE CRM

● Project Area

0 5 10 15 Miles

1:500,000

N



Map 2. Project Location

●asis Rd & Highway 138 Pinon Hills (C-0536)

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Mescal Creek , Calif USGS 7.5-minute quadrangle
T4N, R7W, Section 18
Date of Map: 1995

Project Area

0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
N
1:24,000

Map 3. Project Aerial

●asis Rd & Highway 138 Pinon Hills (C-0536)

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Project Area

0 100 200 Feet

1:2,500

N

ATTACHMENT B

PROJECT PHOTOGRAPHS

Figure 1: Overview of Project from south boundary. View to north.

Figure 2: Overview of Project from southeast corner, view to northeast .

Figure 3: Overview of Project from northwest corner, view to west.

Figure 4: Overview of Project from northeast corner, view to south.

Figure 5: Overview of Project from eastern edge, view to west.

Figure 6: Overview of Project from north edge, view to south.

Figure 7: Overview of Project from southern edge, view to north.

Figure 8: Overview of Project from southeast corner, view to northwest.