



**GENERAL BIOLOGICAL ASSESSMENT  
FOR  
APN: 0631-201-68  
  
SAN BERNARDINO COUNTY  
CALIFORNIA**

**Prepared for:**

**Massaro and Welsh  
C/o Jakki Tonkovich  
34840 Yucaipa, Boulevard  
Yucaipa, CA 92399**

**Prepared by:**

**Hernandez Environmental Services  
17037 Lakeshore Drive  
Lake Elsinore, CA 92530**

**APRIL 2024**

## TABLE OF CONTENTS

<b>1.0</b>	<b>Introduction.....</b>	<b>4</b>
1.1	Project Site Location.....	4
1.2	Project Description.....	4
<b>2.0</b>	<b>Methodology.....</b>	<b>4</b>
2.1	Literature Review.....	4
2.2	Field Survey.....	4
<b>3.0</b>	<b>Existing Conditions and Results.....</b>	<b>5</b>
3.1	Environmental Setting.....	5
3.2	Plant and Habitat Communities.....	5
3.3	Wildlife.....	6
3.4	Regional Connectivity/Wildlife Movement.....	6
3.5	Sensitive Biological Resources.....	6
3.5.1	Sensitive Plant Resources.....	6
3.5.2	Sensitive Animal Resources.....	7
3.6	Critical Habitat.....	8
3.7	Nesting Birds.....	8
3.8	Jurisdictional Waters.....	8
<b>4.0</b>	<b>Project Impacts.....</b>	<b>8</b>
4.1	Impacts to Habitats.....	8
4.2	Impacts to Sensitive Species.....	9
4.3	Impacts to Nesting Birds.....	9
4.4	Impacts to Critical Habitat.....	9
4.5	Impacts to Wildlife Movement Corridors.....	9
4.6	Conflict with Local Policies or Ordinances Protecting Biological Resources.....	9
4.7	Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan.....	10
4.8	State and Federal Drainages.....	10
<b>5.0</b>	<b>Recommendations.....</b>	<b>10</b>
<b>6.0</b>	<b>Certification.....</b>	<b>13</b>
<b>7.0</b>	<b>References.....</b>	<b>14</b>

## **FIGURES**

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Project Plans

Figure 4 – Habitat Map

## **APPENDICES**

Appendix A – Observed Species List

Appendix B – Potential Species List

Appendix C – Site Photographs

Appendix D – Soil Map

## **1.0 Introduction**

Hernandez Environmental Services (HES) was contracted by Massaro and Welsh and Associates to prepare a General Biological Assessment (GBA) for an approximately 7.5-acre project site in the unincorporated community of Joshua Tree, San Bernardino County, California. The project site consists of Assessor's Parcel Numbers (APN) 0631-201-68.

### **1.1 Project Site Location**

The project site is located northeast of the intersection of Mercury Drive and Adele Lane. Specifically, the project site is located within Section 20, Township 1 North and Range 7 East, in the *Joshua Tree North* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude for the project site are 34° 14' 55.8975" North, 116° 18' 31.3395" West (Figures 1 and 2).

### **1.2 Project Description**

The proposed project includes 15 dry campsites for both tent and RV camping, with no water, with each campsite containing a parking spot for one vehicle and a shade structure. All campsites are easily accessible through a hard packed soil road and a turnaround on the project site (Figure 3).

## **2.0 Methodology**

### **2.1 Literature Review**

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. The *Joshua Tree North* and eight surrounding USGS 7.5' topographic quadrangles were used to identify sensitive species with the California Natural Diversity Data Base (CNDDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site.

### **2.2 Field Survey**

On February 15, 2024, HES conducted a field survey of the project site. The ambient temperature at 3:30 P.M. was 65 degrees Fahrenheit, sunny with a few clouds, with winds ranging from zero to nine miles per hour to the southeast. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding land uses, assess the potential for state and federal waters, assess the potential for

wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

### **3.0 Existing Conditions and Results**

#### **3.1 Environmental Setting**

The project site consists mostly of vacant land with three existing structures located on the eastern portion of the site. The site has disturbed habitat with sparse ornamental and native vegetation and creosote bush scrub on the northern portion of the site. There is evidence of previous grading activities within the disturbed habitat on site. The site is bordered by Napa Road north of the site, Giant Rock Road east of the site, and Saturn Street south of the site. Open desert occurs north, east, and south of the site. There are a few residential developments located west of the site. The site is relatively flat with onsite elevations ranging from 2,857 feet above mean sea-level (AMSL) to 2,870 feet AMSL.

#### **3.2 Plant and Habitat Communities**

The 7.5-acre project site has two habitats, 1.2 acres of creosote bush scrub and 6.3 acres of disturbed habitat.

##### **Creosote bush scrub**

The project site has 1.2 acres of disturbed creosote bush scrub habitat on site. The dominant plant species is creosote bush (*Larrea tridentata*). Other plant species found within this habitat include branched pencil cholla (*Cylindropuntia ramosissima*), white bursage (*Ambrosia dumosa*), and white ratany (*Krameria grayi*). The creosote bush scrub habitat is present on the northwest and southwest corners of the site. The vegetation within these areas on site is not dense and there are some areas that appear to have been previously graded or disturbed by motor vehicles.

##### **Disturbed**

The project site has 6.3 acres of disturbed habitat on site. Three existing structures occur within this habitat. This vegetation within these areas is sparse and includes ornamental species such as American century plant (*Agave americana*), saguaro (*Carnegiea gigantea*), and senita cactus (*Pachycereus schottii*).

### 3.3 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include the common raven (*Corvus corax*) and white-crowned sparrow (*Zonotrichia leucophrys*).

### 3.4 Regional Connectivity/Wildlife Movement

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The project area consists of mostly vacant land with residential areas nearby. No drainages, woodlands, canyons, or other features commonly used as wildlife corridors occur on site. . The site would not function as a wildlife corridor. Furthermore, there is vacant land to the south of the site that can continue to be used. No wildlife movement corridors were found to be present on the project site. Development of the site will not block any wildlife corridors or prevent species from moving between wildlife habitat zones.

### 3.5 Sensitive Biological Resources

According to the CNDDDB, a total of 19 sensitive species of plants and 24 sensitive species of animals has the potential to occur on or within the vicinity of the project area. These include those species listed or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS). All habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws. Sensitive species which have a potential to occur will also be discussed in this section. Other special status species are addressed within Appendix B.

#### 3.5.1 Sensitive Plant Resources

A total of 2 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are 1B.1 listed plants on the CNPS Rare Plant Inventory; below are descriptions of these species:

##### **Triple-ribbed milk-vetch**

The triple-ribbed milk-vetch (*Astragalus tricarinatus*) is a federally listed Endangered Species and ranked 1B.2 in the CNPS Rare Plant Inventory. Its habitat includes desert wash, Joshua tree woodland, and sonoran desert scrub habitats. It is often found on hot, rocky slopes in canyons and along the edge of boulder-strewn desert washes with *Larrea* and *Encelia*. No slopes or canyons occur on site. No habitat for this species exists on the project site. **This species is not present.**

**Parish's daisy**

Parish's daisy (*Erigeron parishii*) is a federally Threatened Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. This species is typically found on carbonate; limestone mountain slopes; often associated with drainages and sometimes on granite. Its habitat includes Mojavean desert scrub, pinyon and juniper woodland. The project site is below the elevation range for this species. No habitat for this species exists on the project site. **This species is not present.**

**3.5.2 Sensitive Animal Resources**

A total of 3 animal species are listed as state and/or federal Threatened, Endangered, Candidate will be reviewed in this section. Sensitive species with a potential to occur on site will also be reviewed in this section. Below are descriptions of these species:

**Burrowing owl**

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. This species is a subterranean nester, dependent upon burrowing mammals such as the California ground squirrel. It inhabits open, dry annual or perennial grasslands and scrublands characterized by low-growing vegetation. The project site is mostly paved. No burrows suitable for burrowing owl were found on site. No ground squirrel or other burrowing mammals was noted on site. No suitable habitat for this species occurs on site. **This species is not present.**

**Crotch bumble bee**

Crotch bumble bee (*Bombus crotchii*) is a state Candidate Endangered Species. It's located in coastal California east to the Sierra-Cascade crest and south into Mexico. Its food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. The food plant genera of this species are not found on site. There is no habitat for this species on the project site. **This species is not present.**

**Desert tortoise**

Desert tortoise (*Gopherus agassizii*) is a state and federally listed Threatened Species. This species is found in Joshua tree woodland, Mojavean desert scrub, and Sonoran Desert scrub habitats. It requires friable soil for burrow and nest construction. It prefers creosote bush habitat with large annual wildflower blooms. The site consists of mostly disturbed habitat. The creosote bush scrub habitat on site is minimal and bordered by disturbed areas. No CNDDDB recorded occurrence of desert tortoise occur within 5 miles of the project site. No suitable habitat for this species occurs on site. **This species is not present.**

**Least Bell's vireo**

Least Bell's vireo (*Vireo bellii pusillus*) is a federal and state listed Endangered Species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this

species is restricted to willow and/or mule fat dominated riparian scrub along permanent or nearly permanent streams. No suitable habitat for this species is present on the project site. **This species is not present.**

### **3.6 Critical Habitat**

Critical habitat is designated by USFWS for endangered and threatened species per the federal ESA (16 U.S.C. § 1533 (a)(3)), and to the extent prudent and determinable. Special management of critical habitat, including measures for water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types is required to ensure the long-term survival and recovery of the identified species. Critical habitat designation delineates all suitable habitat for the species. The project site is not located within or adjacent to federally designated critical habitat for endangered species.

### **3.7 Nesting Birds**

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit “take” of all birds and their active nests. In this context, the term “take” is defined by Fish and Game Code section 86 as hunt, pursue, catch, capture, or kill. The project site contains shrubs and trees that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 15.

### **3.8 Jurisdictional Waters**

The project site does not contain any drainage, riparian, or riverine features. There are no CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project site boundaries.

## **4.0 Project Impacts**

### **Impacts to Habitats**

The proposed project is expected to impact 2.10 acre of the 7.5-acre site. Implementation of the proposed project will impact approximately 0.27 acre of creosote bush scrub and 1.83 acres of disturbed habitat.



## 4.2 Impacts to Sensitive Species

### Western Joshua tree

The Western Joshua tree is a state listed Candidate Endangered species. This species is protected under the Western Joshua Tree Conservation Act and the California Endangered Species Act (CESA), which prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. Two individual Joshua trees were found during the Western Joshua tree census performed in 2024. Implementation of the measures outlined in the Recommendations section of this report will ensure impacts to this species are less than significant.

## 4.3 Impacts to Nesting Birds

Potential impacts to nesting birds may occur if ground disturbing activities or vegetation removal occur during the bird nesting season of February 1 through September 15. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to nesting birds are less than significant.

## 4.4 Impacts to Critical Habitat

The project site is not within federal critical habitat. No impacts to federal critical habitat are expected.

## 4.5 Impacts to Wildlife Movement Corridors

No wildlife movement corridors were found to be present on the project site. No impacts are expected.

## 4.6 Conflict with Local Policies or Ordinances Protecting Biological Resources

The San Bernardino County Development Code Section 88.01.060 provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. Per Section 88.01.060 of the San Bernardino County Development Code the following desert native plants or any part of them, except the fruit shall not be removed except under a Tree or Plant Removal Permit:

(1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:

- (A) *Dalea spinosa* (smoketree).
  - (B) All species of the genus *Prosopis* (mesquites).
- (2) All species of the family Agavaceae (century plants, nolinias, yuccas).

- (3) Creosote Rings, ten feet or greater in diameter.
- (4) All Joshua trees.
- (5) Any part of any of the following species, whether living or dead:
  - (A) *Olneya tesota* (desert ironwood).
  - (B) All species of the genus *Prosopis* (mesquites).
  - (C) All species of the genus *Cercidium* (palos verdes).

Three Joshua trees are located on or adjacent to the project site. The American century plants on site are ornamental and will not be impacted by the proposed project. No other desert native plants regulated under Section 88.01.060 of the San Bernardino Development Code are present on the site. Section 88.01 requires the issuance of a permit prior to the removal of regulated trees and plants. Implementation of the measure outlined in the Recommendations section of this report would ensure that no conflicts with local policies or ordinances are expected.

#### **4.7 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan**

The Project would not be anticipated to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### **4.8 State and Federal Drainages**

The proposed project is expected to impact the entire site. There are no ephemeral drainages evident on site and therefore any impacts are considered not significant to CDFW and RWQCB jurisdictional waters.

#### **5.0 Recommendations**

Based upon the findings of this report, it is recommended that the following studies or surveys be performed as part of the project.

##### Western Joshua tree

- Two Joshua trees were found on site during the focused Western Joshua Tree census survey performed in 2024. Any impacts to the Joshua tree or within 50 feet of the western Joshua tree would require compliance with the Western Joshua Tree Conservation Act (WJTCA) which was passed in July 2023 to conserve western Joshua tree and its habitat

while supporting the state's renewable energy and housing priorities. The WJTCA authorizes CDFW to:

- Permit the trimming and removal of hazardous or dead western Joshua trees.
- Permit the incidental take of western Joshua trees under CESA provided the permittee meets certain conditions.

Any proposed impacts to the Joshua trees on site would require prior authorization from CDFW.

- Removal of onsite Joshua trees or century plants would be required to comply with Section 88.01 of the San Bernardino Development Code, which requires the issuance of a permit prior to the removal of regulated trees and plants.

### Nesting Birds

- It is recommended that vegetation removal be conducted outside of the nesting season for migratory birds to avoid direct impacts.
- If vegetation removal occurs during the migratory bird nesting season, between February 1 and September 15, pre-construction nesting bird surveys shall be performed within three days prior to vegetation removal.
- If active nests are found during nesting bird surveys, they shall be flagged. A 250-foot buffer shall be fenced around songbird nests and a 500-foot buffer shall be fenced around raptor nests.

### Desert Tortoise

The desert tortoise (*Gopherus agassizii*) is a state listed Endangered Species and federally listed Threatened Species. This species is found in Joshua tree woodland, Mojavean desert scrub, and Sonoran Desert scrub habitats. It requires friable soil for burrow and nest construction. It prefers creosote bush habitat with large annual wildflower blooms. The site consists of disturbed habitat. The creosote bush scrub habitat on site is minimal and bordered by disturbed areas. No CNDDDB recorded occurrence of desert tortoise within 5 miles of the project site. No suitable habitat for this species occurs on site. This species is not present. However, due to the project being located in Desert Tortoise Medium Population overlay, Mitigation Measure BIO-2 is recommended: prior to grading pre-construction desert tortoise surveys shall be conducted to avoid any impacts to desert tortoise.

**MM BIO – 2** No more than 14 calendar days prior to start of Project activities, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS Desert Tortoise (Mojave Population) Field Manual (USFWS 2009 or most recent version). Pre-

construction surveys shall be completed using linear survey transects 10-meters apart within the Project area and 500- foot buffer zone. Should desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance measures. The project will insure no impacts to desert tortoise by avoiding any direct and indirect take as defined by the California and Federal Endangered Species acts.

## 6.0 Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Date 3/28/2024

Signed \_\_\_\_\_

PROJECT MANAGER

Fieldwork Performed By:

Elizabeth Gonzalez

\_\_\_\_\_  
Senior Biologist

Carissa Gomez

\_\_\_\_\_  
Assistant Biologist

## 7.0 References

American legal Publishing. San Bernardino County, California Code of Ordinances 88.01.060 Desert Native Plant Protection. Available at [https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncity\\_ca/0-0-0-146479](https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncity_ca/0-0-0-146479).

Accessed July 2023

California Department of Fish and Wildlife. 2024. Fish and Game Code of California, Division 2. Chapter 11.5. *Western Joshua Tree Conservation Act* Section 1927-1927.12

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDDB). Accessed February 2024 California Department of Fish and Wildlife, Sacramento, California.

Garrett, K. and J. Dunn, 1981. *Birds of Southern California*. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.

Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. *A Check-list of the Amphibians, Reptiles, Birds and Mammals of California*. California Wildlife Habitat Relationship System, California Department of Fish and Game, Sacramento, California.

Hickman, J. C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press.

Jepson Flora Project (eds.) 2023, *Jepson eFlora*, <https://ucjeps.berkeley.edu/eflora/>

List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.

Munz, P.A., 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.

Peterson, R. 1990. *A Field Guide to Western Birds*. Houghton Mifflin Company, Boston, MA.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009 *A Manual of California Vegetation, 2nd edition*. California Native Plant Society Press, Sacramento, CA.

U.S Fish and Wildlife Service, 2014. *Endangered and Threatened Wildlife and Plants*. <https://www.fws.gov/endangered/species/us-species.html>. Accessed March 2024.

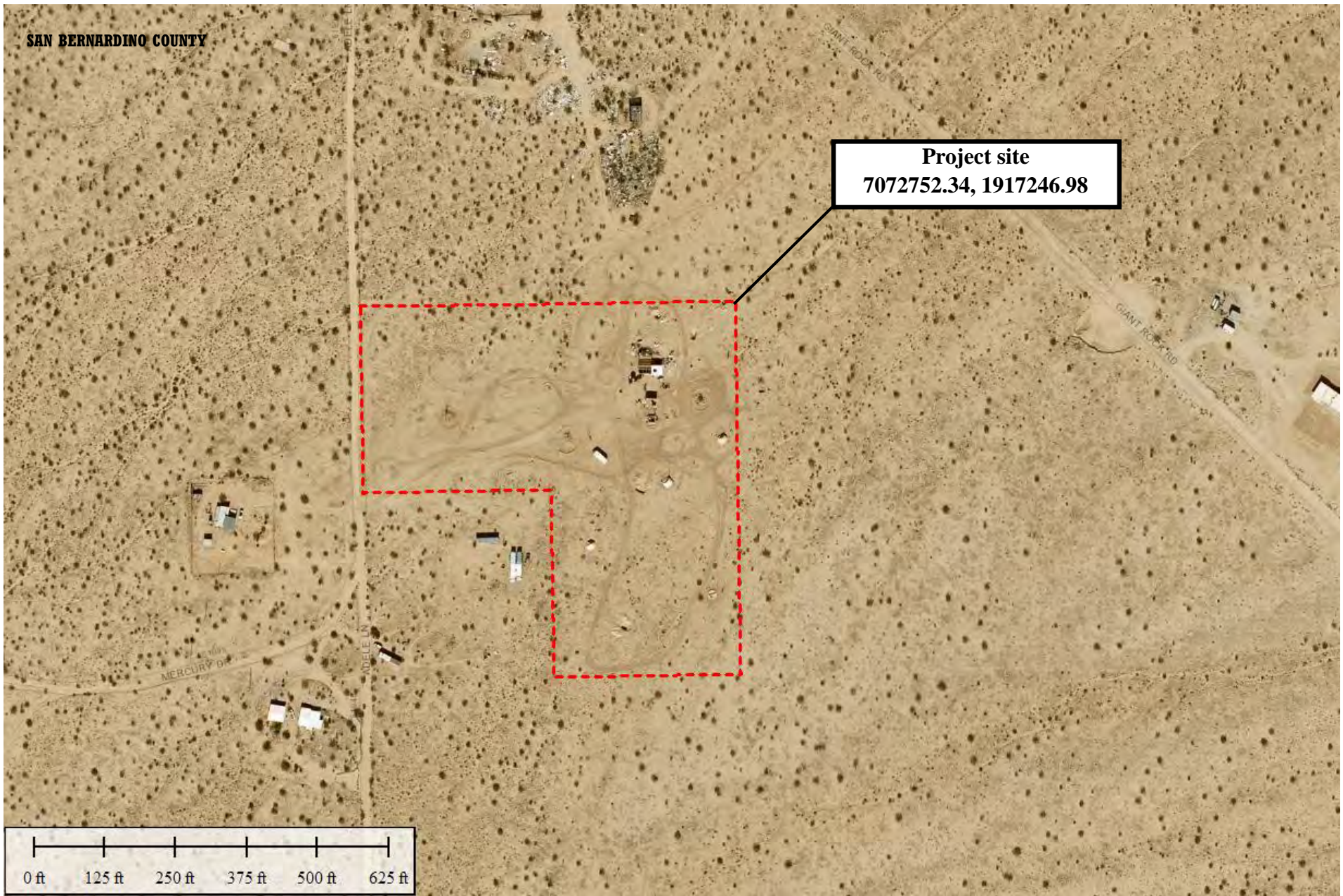
Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed March 2024

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer and M. White, 1990. *California's Wildlife, Volume III Mammals*, The Resources Agency, Department of Fish and Game, Sacramento, California.

# FIGURES



SAN BERNARDINO COUNTY

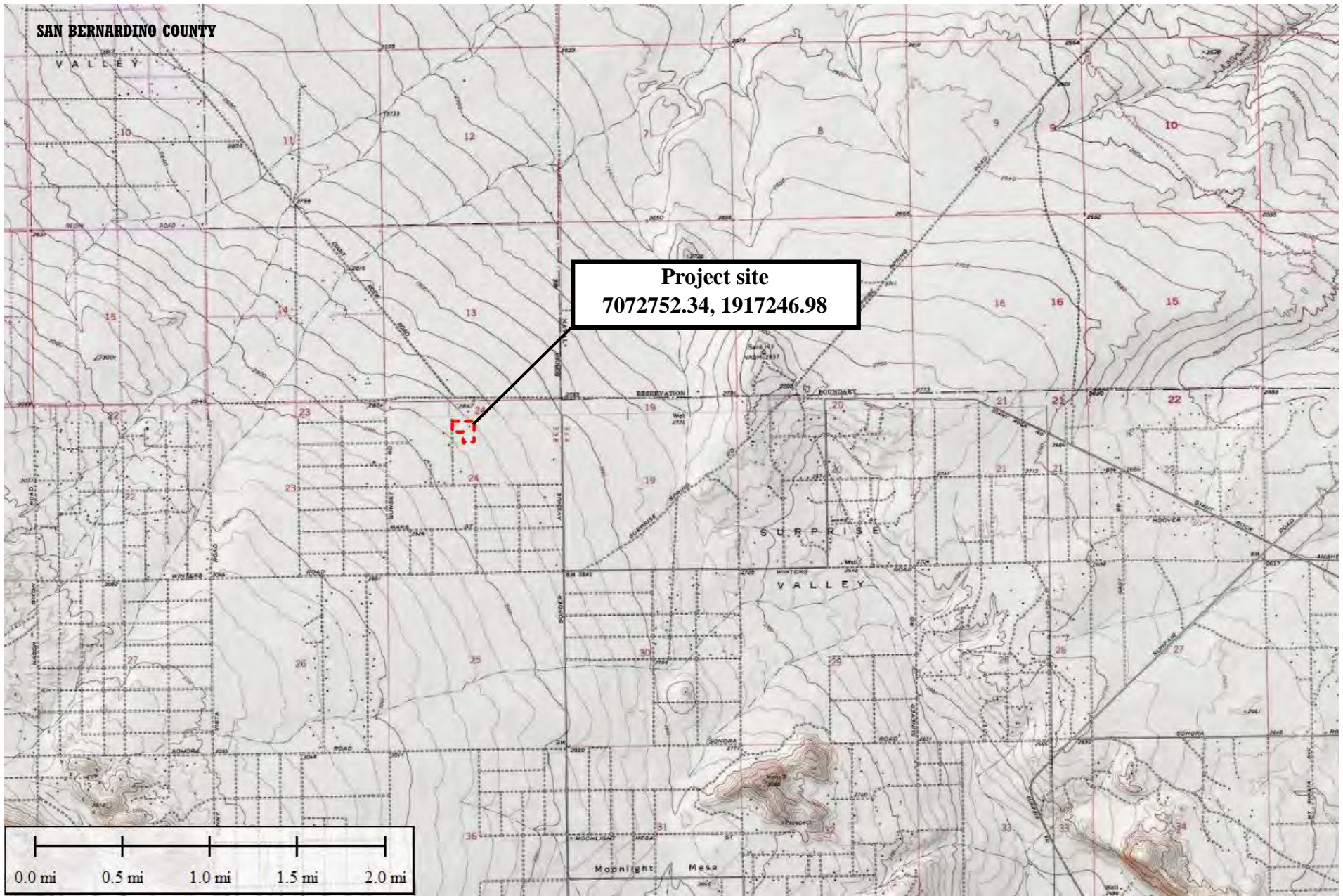


**Figure 1**  
Location Map  
APN 0631-201-68  
62076 Mercury Drive, Joshua Tree  
San Bernardino County, California

**Legend**  
[Red dashed box] Project site (7.5 acres)







**Figure 2**  
 Vicinity Map  
 APN 0631-201-68  
 62076 Mercury Drive, Joshua Tree  
 San Bernardino County, California

**Legend**  
 Project site (7.5 acres)

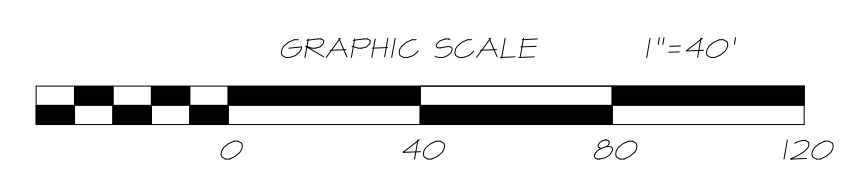
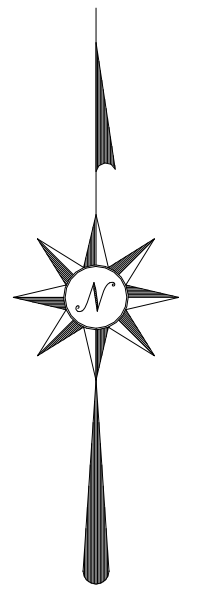
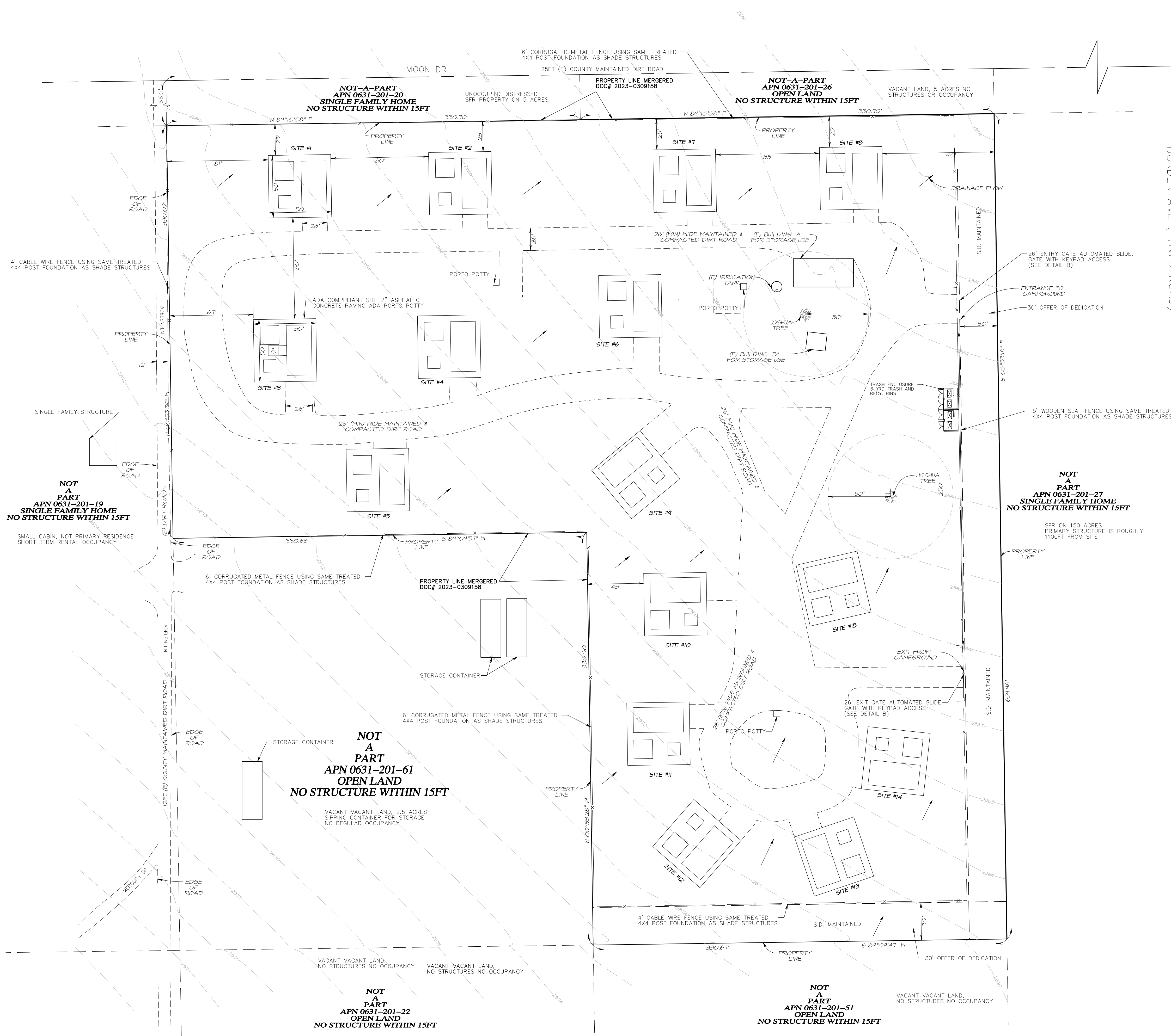




# CONDITIONAL USE PERMIT

## COUNTY OF SAN BERNARDINO

" OFFICIAL USE ONLY "



NO.	REVISIONS	DATE	INITIAL

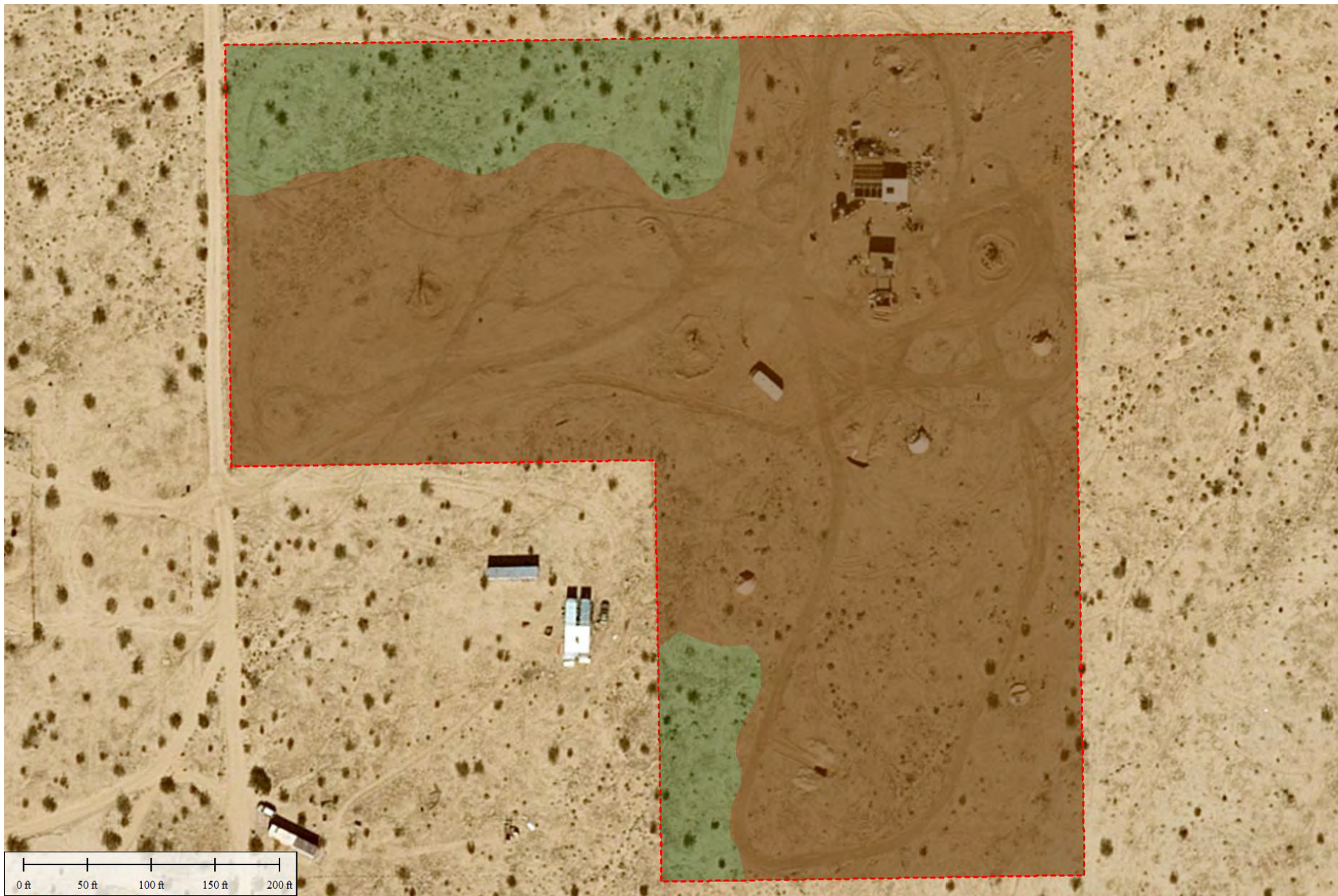
APPROVED BY:  
  
PAUL T. WELSH, P.E., L.S.  
R.C.E. 37394 L.S. 5205






PLAN PREPARED BY:  
**MASSARO & WELSH**  
CIVIL ENGINEERS LAND SURVEYORS  
34840 YUCAIPA BLVD.  
YUCAIPA, CA 92399  
909-797-5300  
PREPARED: APRIL 2023

PREPARED FOR:  
**JT PROSPECTING LLC**  
447 HOWLAND CANAL  
VENICE, CA 90291  
JOSEPH MILBURN  
PH# 920-248-1133

PROJECT:  
**CONDITIONAL USE PERMIT**  
62076 MERCURY DRIVE  
JOSHUA TREE  
SHEET 2 OF 2 SHEET

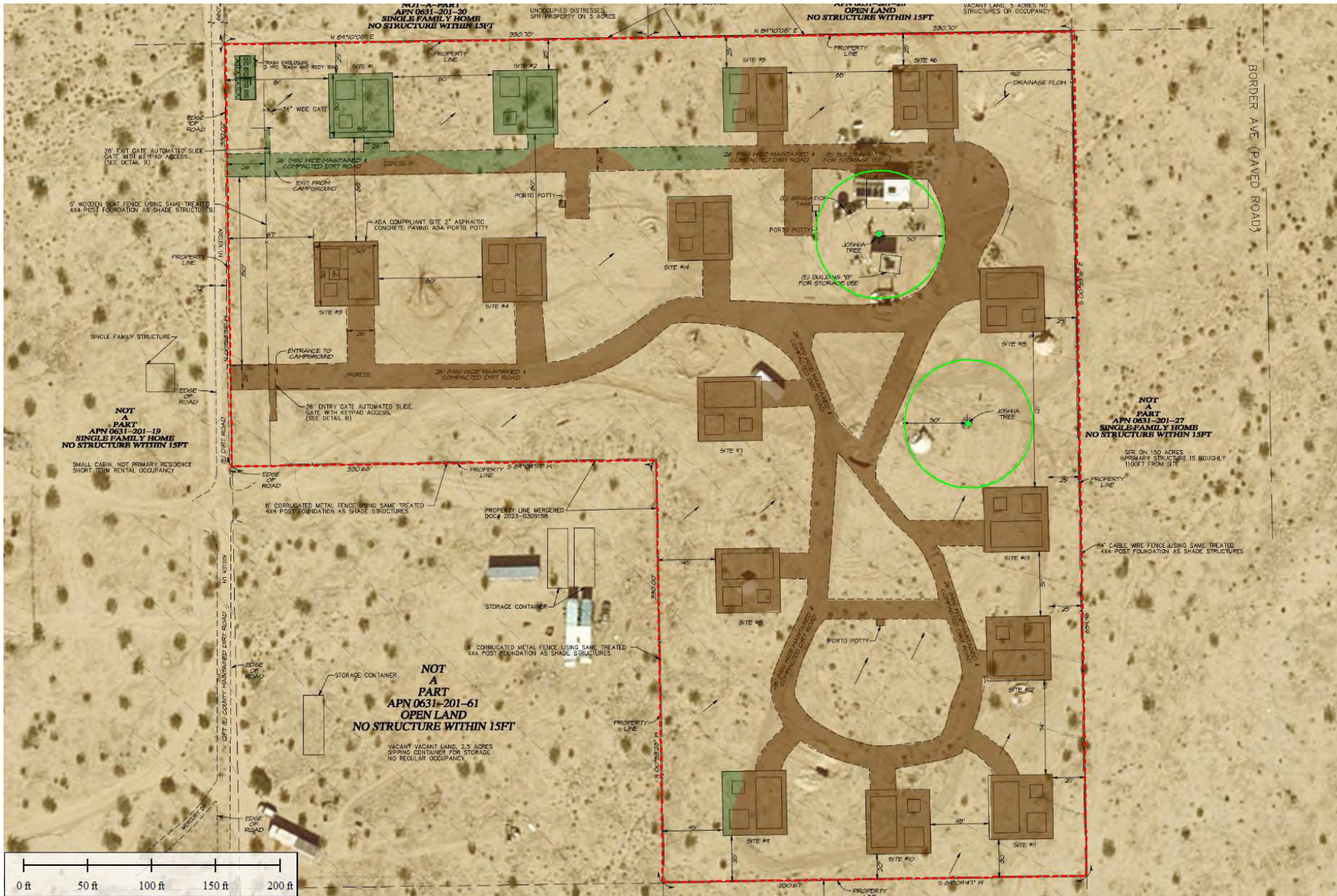


**Figure 4**  
 Habitat Map  
 APN 0631-201-68  
 62076 Mercury Drive, Joshua Tree  
 San Bernardino County, California

- Legend**
-  Project site (7.5 acres)
  -  Creosote bush habitat (1.2 acres)
  -  Disturbed habitat (6.3 acres)







**Figure 5**  
 Impact Map  
 APN 0631-201-68  
 62076 Mercury Drive, Joshua Tree  
 San Bernardino County, California

**Legend**

- Project site (7.5 acres)
- Creosote bush habitat (0.27 acre)
- Disturbed habitat (1.83 acres)

- Western Joshua Tree
- 50 Foot Buffer



# **APPENDIX A**

## Observed Species

### Plant List:

<b>Scientific Name</b>	<b>Common Name</b>
<i>Agave americana</i>	American century plant
<i>Ambrosia dumosa</i>	White bursage
<i>Amsinckia tessellata</i>	Bristly fiddleneck
<i>Asclepias subblata</i>	Rush milkweed
<i>Carnegiea gigantea</i>	Saguaro
<i>Cylindropuntia echinocarpa</i>	Silver cholla
<i>Cylindropuntia ramosissima</i>	Branched pencil cholla
<i>Ferocactus cylindraceus</i>	Barrel cactus
<i>Krameria grayi</i>	White ratany
<i>Larrea tridentata</i>	Creosote bush
<i>Opuntia basilaris</i>	Beavertail cactus
<i>Pachycereus schottii</i>	Senita cactus
<i>Sphaeralcea ambigua</i>	Desert mallow
<i>Yucca brevifolia</i>	Joshua tree

### Wildlife List:

<b>Scientific Name</b>	<b>Common Name</b>
<i>Corvus corax</i>	Common raven
<i>Zonotrichia leucophrys</i>	White-crowned sparrow

## **APPENDIX B**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
<i>Astragalus bernardinus</i>	San Bernardino milk-vetch	Dicots	None	None	1B.2	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden   USFS_S-Sensitive	Joshua tree woodland   Limestone   Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland.	Granitic or carbonate substrates. 290-2290 m.	There is no suitable habitat on site. This species is not present.
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	Dicots	Endangered	None	1B.2	SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden	Desert wash   Joshua tree woodland   Sonoran desert scrub	Joshua tree woodland, Sonoran desert scrub.	Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, with <i>Larrea</i> and <i>Encelia</i> . 455-1585 m.	There is no suitable habitat on site. This species is not present.



Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Berberis fremontii	Fremont barberry	Dicots	None	None	2B.3	SB_CalBG/RS ABG- California/Rancho Santa Ana Botanic Garden	Joshua tree woodland   Pinon & juniper woodlands	Pinyon and juniper woodland, Joshua tree woodland.	Rocky, sometimes granitic. 1140-1770 m.	There is no suitable habitat on site. This species is not present.
Boechera dispar	pinyon rockcress	Dicots	None	None	2B.3	SB_CalBG/RS ABG- California/Rancho Santa Ana Botanic Garden	Joshua tree woodland   Mojavean desert scrub   Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub.	Granitic, gravelly slopes and mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Calochortus striatus	alkali mariposa-lily	Monocots	None	None	1B.2	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden   USFS_S-Sensitive	Chaparral   Chenopod scrub   Meadow & seep   Mojavean desert scrub   Wetland	Chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps.	Alkaline meadows and ephemeral washes. 70-1600m.	There is no suitable habitat on site. This species is not present.
Cymopterus multinervatus	purple-nerve cymopterus	Dicots	None	None	2B.2		Joshua tree woodland   Mojavean desert scrub	Mojavean desert scrub, pinyon and juniper woodland.	Sandy or gravelly places. 765-2195 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Erigeron parishii	Parish's daisy	Dicots	Threatened	None	1B.1	SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden	Limestone   Mojavean desert scrub   Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	Often on carbonate; limestone mountain slopes; often associated with drainages. Sometimes on granite. 1050-2245 m.	There is no suitable habitat on site. This species is not present.
Grusonia parishii	Parish's club-cholla	Dicots	None	None	2B.2		Joshua tree woodland   Mojavean desert scrub   Sonoran desert scrub	Mojavean desert scrub, Sonoran desert scrub, Joshua tree woodland.	Sandy or rocky sites. 840-1600 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Jaffueliobryum raui	Rau's jaffueliobryum moss	Bryophytes	None	None	2B.3		Alpine dwarf scrub   Chaparral   Limestone   Mojavean desert scrub   Sonoran desert scrub	Alpine dwarf scrub, chaparral, Mojavean desert scrub, Sonoran desert scrub.	Dry openings, rock crevices. On dry sandstone or limestone. 425-2015 m.	There is no suitable habitat on site. This species is not present.
Linanthus bernardinus	Pioneertown linanthus	Dicots	None	None	1B.2	SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden	Joshua tree woodland   Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland.	1120-1345 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Linanthus maculatus ssp. maculatus	Little San Bernardino Mtns. linanthus	Dicots	None	None	1B.2	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden	Desert dunes   Desert wash   Joshua tree woodland   Mojavean desert scrub   Sonoran desert scrub	Desert dunes, Sonoran desert scrub, Mojavean desert scrub, Joshua tree woodland.	Sandy places. Usually in light-colored quartz sand; often in wash or bajada. 135-1220 m.	There is no suitable habitat on site. This species is not present.
Matelea parvifolia	spear-leaf matelea	Dicots	None	None	2B.3	USFS_S-Sensitive	Mojavean desert scrub   Sonoran desert scrub	Mojavean desert scrub, Sonoran desert scrub.	Dry rocky ledges and slopes. 360-1440 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Monardella robisonii	Robison's monardella	Dicots	None	None	1B.3	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden	Pinon & juniper woodlands	Pinyon and juniper woodland.	Rocky desert slopes, often among granitic boulders. 610-1615 m.	There is no suitable habitat on site. This species is not present.
Muhlenbergia appressa	appressed muhly	Monocots	None	None	2B.2		Coastal scrub   Mojavean desert scrub   Valley & foothill grassland	Coastal scrub, Mojavean desert scrub, valley and foothill grassland.	Rocky slopes, canyon bottoms. 20-1600 m.	There is no suitable habitat on site. This species is not present.
Penstemon clevelandii var. mohavensis	Mojave beardtongue	Dicots	None	None	1B.2		Mojavean desert scrub   Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	Rocky, granitic (often). 925-1620 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	Dicots	None	None	1B.2	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden   SB_USDA-US Dept of Agriculture   USFS_S-Sensitive	Chaparral   Limestone   Mojavean desert scrub   Pinon & juniper woodlands	Chaparral, Mojavean desert scrub, pinyon and juniper woodland.	Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
<i>Sphaeralcea rusbyi</i> var. <i>eremicola</i>	Rusby's desert-mallow	Dicots	None	None	1B.2	BLM_S-Sensitive   SB_CalBG/RS ABG-California/Rancho Santa Ana Botanic Garden   SB_USDA-US Dept of Agriculture	Desert wash   Joshua tree woodland   Limestone   Mojavean desert scrub	Mojavean desert scrub, Joshua tree woodland.	In creosote bush scrub, blackbush scrub, Joshua tree woodland; sometimes on carbonate; sometimes in washes. 425-1645 m.	There is no suitable habitat on site. This species is not present.
<i>Streptanthus campestris</i>	southern jewelflower	Dicots	None	None	1B.3	BLM_S-Sensitive   SB_CRES-San Diego Zoo CRES Native Gene Seed Bank   USFS_S-Sensitive	Chaparral   Lower montane coniferous forest   Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Open, rocky areas. 605-2590 m.	There is no suitable habitat on site. This species is not present.



Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Wislizenia refracta ssp. refracta	jackass-clover	Dicots	None	None	2B.2		Alkali playa   Desert dunes   Desert wash   Mojavean desert scrub   Sonoran desert scrub	Playas, desert dunes, Mojavean desert scrub, Sonoran desert scrub.	Sandy washes, roadsides, alkaline flats. 380-1160 m.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None	CDFW_SSC- Species of Special Concern   USFS_S-Sensitive	Broadleaved upland forest   Chaparral   Coastal dunes   Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   USFS_S-Sensitive	Chaparral   Coastal scrub   Desert wash   Great Basin grassland   Great Basin scrub   Mojavean desert scrub   Riparian woodland   Sonoran desert scrub   Upper montane coniferous forest   Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive   CDF_S-Sensitive   CDFW_FP-Fully Protected   CDFW_WL-Watch List   IUCN_LC-Least Concern	Broadleaved upland forest   Cismontane woodland   Coastal prairie   Great Basin grassland   Great Basin scrub   Lower montane coniferous forest   Pinon & juniper woodlands   Upper montane coniferous forest   Valley & foothill grassland	Rolling foothills, mountain areas, sage juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Athene cunicularia	burrowing owl	Birds	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   USFWS_BC-C-Birds of Conservation Concern	Coastal prairie   Coastal scrub   Great Basin grassland   Great Basin scrub   Mojavean desert scrub   Sonoran desert scrub   Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	There is no suitable habitat on site. This species is not present.
Bombus crotchii	Crotch's bumble bee	Insects	None	Candidate Endangered	IUCN_EN-Endangered		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	Mammals	None	None		Desert wash   Pinon & juniper woodlands   Sonoran desert scrub	Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	There is no suitable habitat on site. This species is not present.
Crotalus ruber	red-diamond rattlesnake	Reptiles	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern   USFS_S- Sensitive	Chaparral   Mojavean desert scrub   Sonoran desert scrub	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Eumops perotis californicus	western mastiff bat	Mammals	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern	Chaparral   Cismontane woodland   Coastal scrub   Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	There is no suitable habitat on site. This species is not present.
Falco mexicanus	prairie falcon	Birds	None	None	CDFW_WL-Watch List   IUCN_LC-Least Concern	Great Basin grassland   Great Basin scrub   Mojavean desert scrub   Sonoran desert scrub   Valley & foothill grassland	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Gopherus agassizii	desert tortoise	Reptiles	Threatened	Threatened	IUCN_CR-Critically Endangered	Joshua tree woodland   Mojavean desert scrub   Sonoran desert scrub	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	There is no suitable habitat on site. This species is not present.
Lasiurus cinereus	hoary bat	Mammals	None	None	IUCN_LC-Least Concern	Broadleaved upland forest   Cismontane woodland   Lower montane coniferous forest   North coast coniferous forest	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	There is no suitable habitat on site. This species is not present.



Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Lasiurus xanthinus	western yellow bat	Mammals	None	None	CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern	Desert wash	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	There is no suitable habitat on site. This species is not present.
Myotis thysanodes	fringed myotis	Mammals	None	None	BLM_S-Sensitive   IUCN_LC-Least Concern   USFS_S-Sensitive		In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer.	Uses caves, mines, buildings or crevices for maternity colonies and roosts.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Joshua tree woodland   Pinon & juniper woodlands   Riparian scrub   Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	There is no suitable habitat on site. This species is not present.
Nyctinomops macrotis	big free-tailed bat	Mammals	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern		Low-lying arid areas in Southern California.	Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Ovis canadensis nelsoni	desert bighorn sheep	Mammals	None	None	BLM_S-Sensitive   CDFW_FP-Fully Protected   USFS_S-Sensitive	Alpine   Alpine dwarf scrub   Chaparral   Chenopod scrub   Great Basin scrub   Mojavean desert scrub   Montane dwarf scrub   Pinon & juniper woodlands   Riparian woodland   Sonoran desert scrub	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co.	Open, rocky, steep areas with available water and herbaceous forage.	There is no suitable habitat on site. This species is not present.

<b>Scientific Name</b>	<b>Common Name</b>	<b>Taxon Group</b>	<b>Federal List</b>	<b>State List</b>	<b>Other Status</b>	<b>Habitats</b>	<b>General Habitat</b>	<b>Microhabitat</b>	<b>Presence/Absence</b>
Paranomada californica	California cuckoo bee	Insects	None	None					There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive   CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Chaparral   Cismontane woodland   Coastal bluff scrub   Coastal scrub   Desert wash   Pinon & juniper woodlands   Riparian scrub   Riparian woodland   Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Riparian forest   Riparian scrub   Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Taxidea taxus	American badger	Mammals	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Alkali marsh   Alkali playa   Alpine   Alpine dwarf scrub   Bog & fen   Brackish marsh   Broadleaved upland forest   Chaparral   Chenopod scrub   Cismontane woodland   Closed- cone coniferous forest   Coastal bluff scrub   Coastal dunes   Coastal prairie	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Toxostoma bendirei	Bendire's thrasher	Birds	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_VU-Vulnerable   USFWS_BC-C-Birds of Conservation Concern	Joshua tree woodland   Mojavean desert scrub	Migratory; local spring/summer resident in flat areas of desert succulent shrub/Joshua tree habitats in Mojave Desert.	Nests in cholla, yucca, palo verde, thorny shrub, or small tree, usually 0.5 to 20 feet above ground.	There is no suitable habitat on site. This species is not present.



Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Toxostoma lecontei	Le Conte's thrasher	Birds	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   USFWS_BC-C-Birds of Conservation Concern	Desert wash   Mojavean desert scrub   Sonoran desert scrub	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.	Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	There is no suitable habitat on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Microhabitat	Presence/Absence
Uma scoparia	Mojave fringe-toed lizard	Reptiles	None	None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern	Desert dunes   Desert wash   Mojavean desert scrub	Fine, loose, wind-blown sand in sand dunes, dry lakebeds, riverbanks, desert washes, sparse alkali scrub and desert scrub.	Shrubs or annual plants may be necessary for arthropods found in the diet.	There is no suitable habitat on site. This species is not present.
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		Riparian forest   Riparian scrub   Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	There is no suitable habitat on site. This species is not present.

## **APPENDIX C**



View of the disturbed habitat on the southern portion of the site from the southeast corner facing northeast.



View from the southeast corner facing north.



View of some of the tents on site.



View of the northeast corner of the site.



View of the existing structures near the northeast corner of the site.



View of the existing structures near the northeast corner of the site.



View of creosote bush scrub habitat present on the northwest portion of the site.



View of disturbed habitat present on the northwest portion of the site.

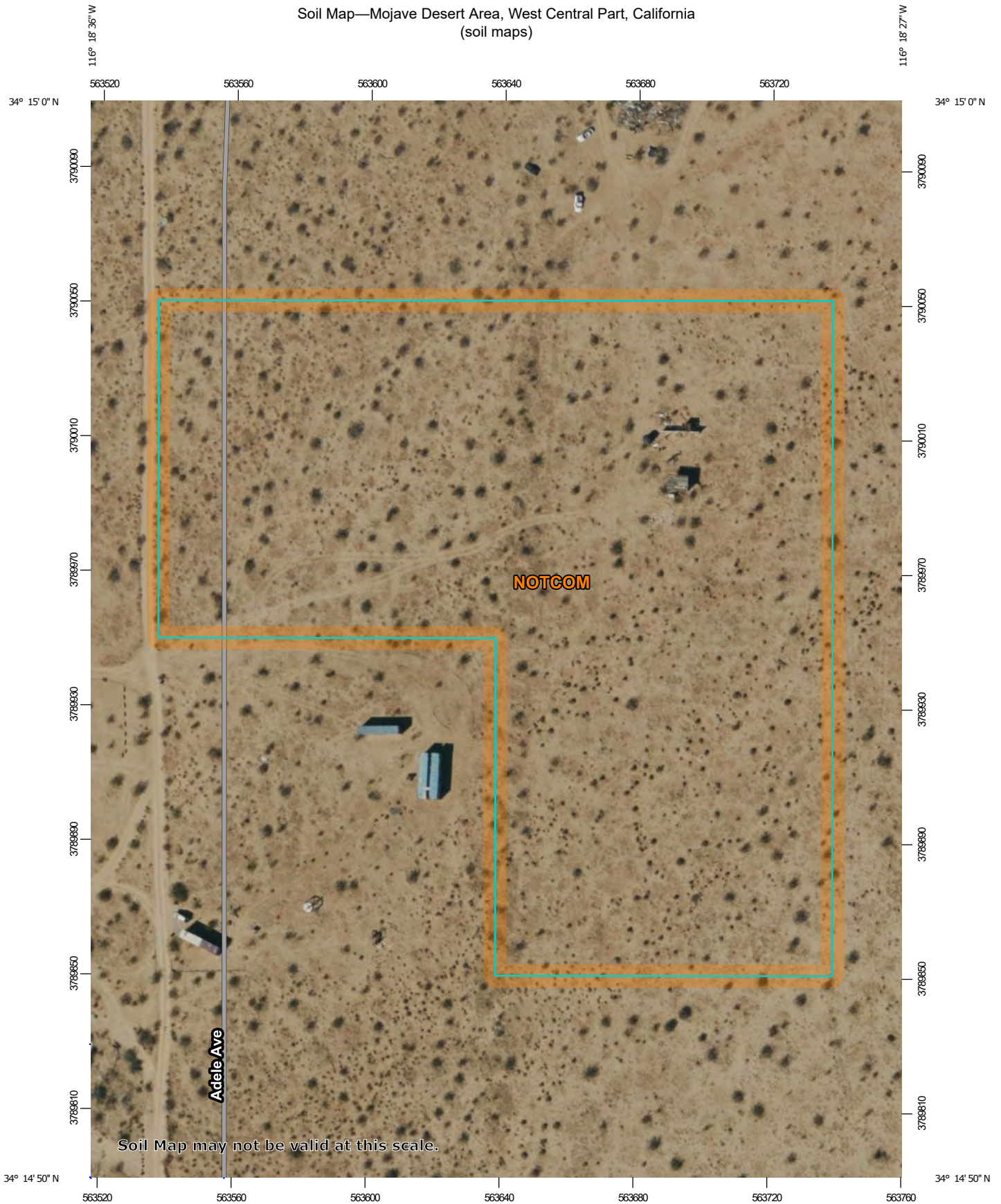


View of the ornamental century plants present on site.

## **APPENDIX D**

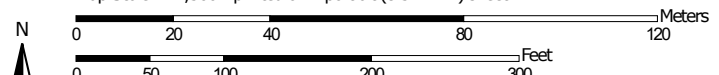


Soil Map—Mojave Desert Area, West Central Part, California  
(soil maps)



Soil Map may not be valid at this scale.

Map Scale: 1:1,560 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



Soil Map—Mojave Desert Area, West Central Part, California  
(soil maps)


### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**






 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mojave Desert Area, West Central Part, California  
Survey Area Data: Version 16, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2021—May 27, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NOTCOM	No Digital Data Available	7.5	100.0%
<b>Totals for Area of Interest</b>		<b>7.5</b>	<b>100.0%</b>