

**Focused Survey for Agassiz's Desert Tortoise,
Habitat Evaluation for Burrowing Owl, and
General Biological Resource Assessment for a
0.6-acre± Site (APN 585-062-65) in the Town of Yucca Valley
San Bernardino County, California**

(U.S. Geological Survey 7.5' Yucca Valley South Quadrangle, Township 1 South, Range 5 East,
a portion of the NW ¼ of SE ¼ of Section 12, S.B.B.&M.)

Job#: 24-047

Prepared by:

Circle Mountain Biological Consultants, Inc.

P.O. Box 3197

Wrightwood, California 92397

PH/FAX: (760) 249-4948

Website: www.circlemountainbiological.com

Emails: ed.larue@verizon.net

sharon_dougherty@circlemountainbiological.com

Contacts: Ed LaRue, Sharon Dougherty

Prepared for:

NV5

42-829 Cook Street, Suite 104

Palm Desert, California 92211-5109

PH: (760) 341-3101

FAX: (760) 469-4086

Email: vickie.bridenstine@nv5.com

Contact: Vickie Bridenstine

I hereby certify that the statements furnished herein, including **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. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.



Circle Mountain Biological Consultants, Inc.
Author and Field Investigator: Susan Seville

October 2024

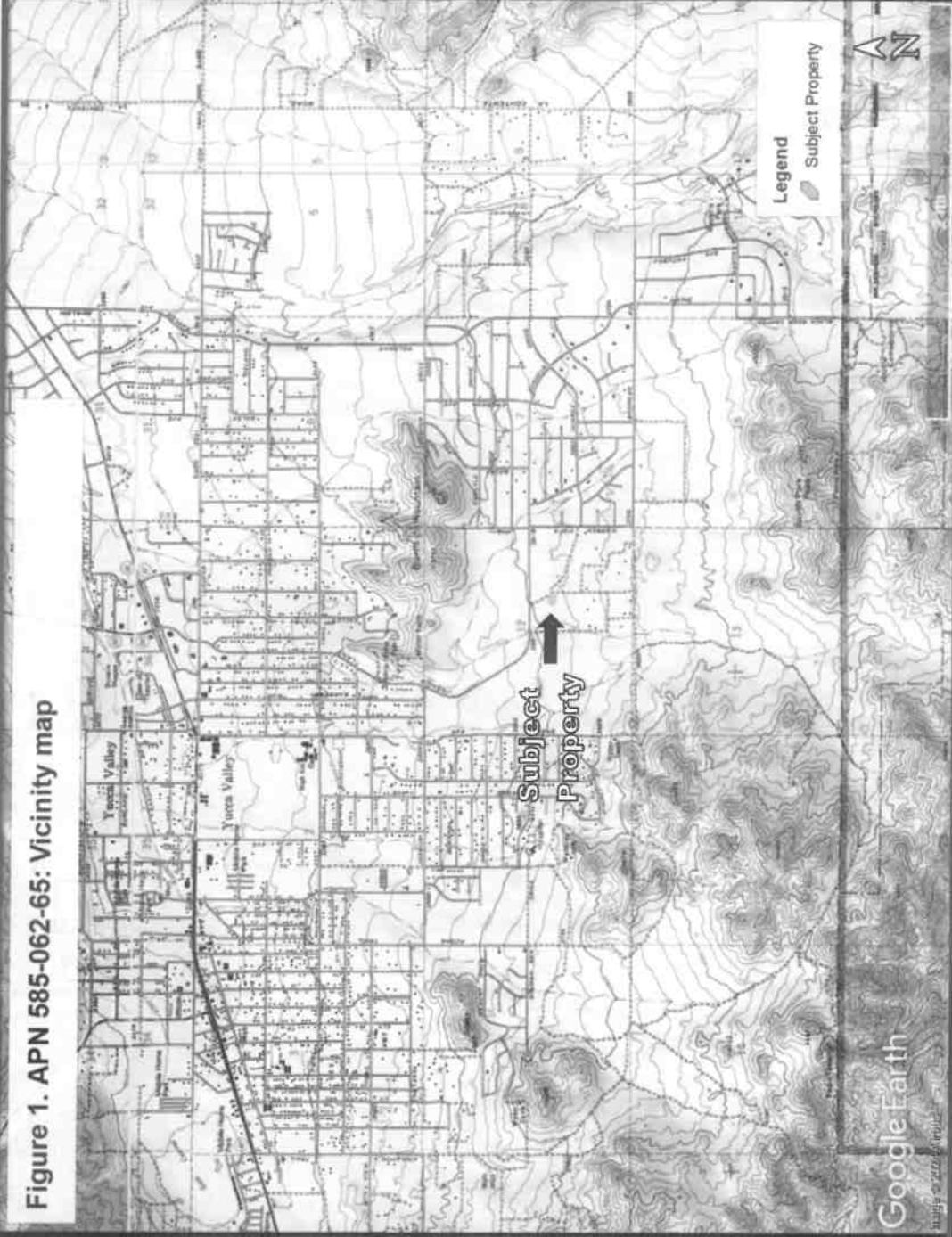
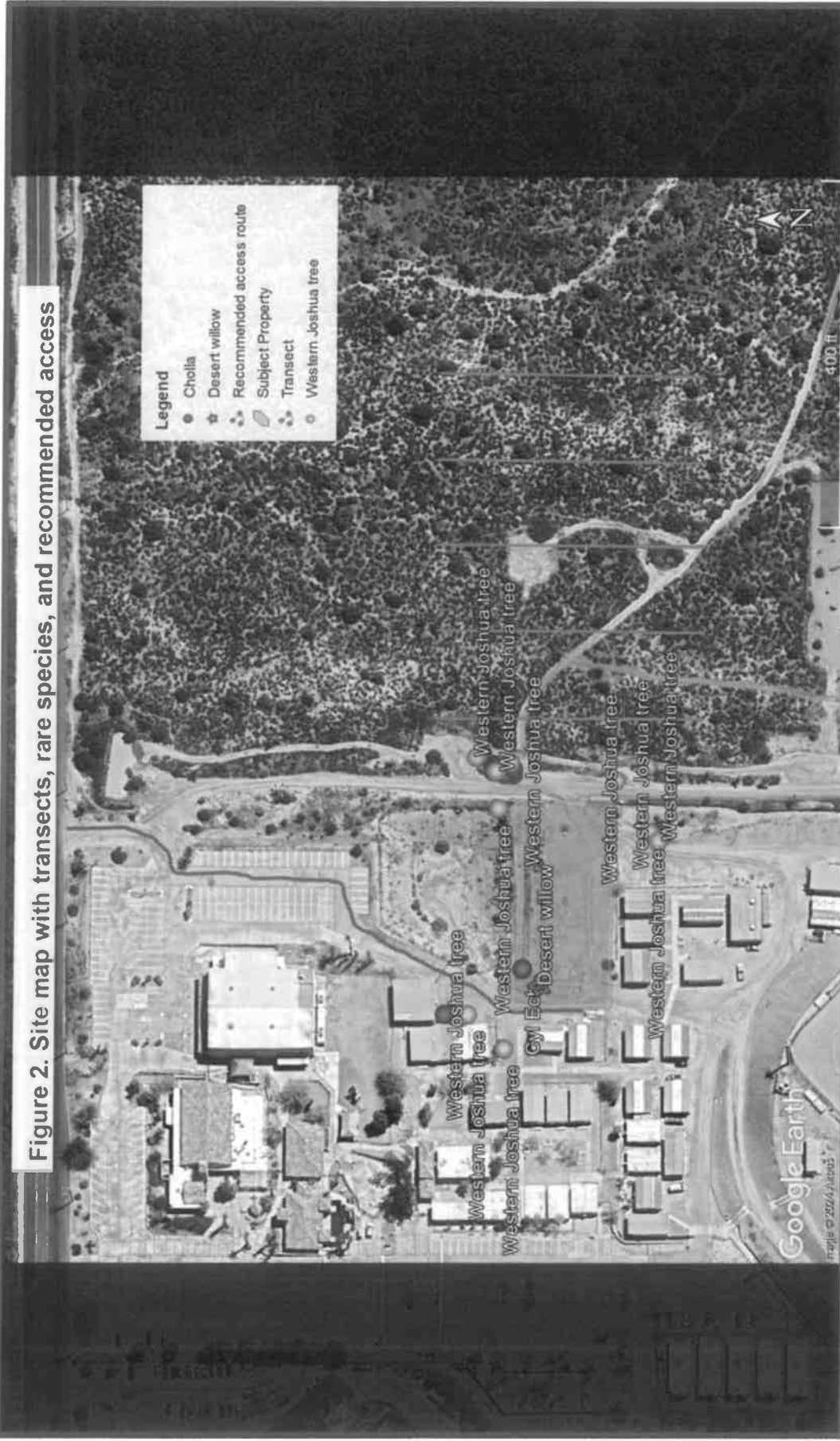


Figure 1. APN 585-062-65: Vicinity map

Figure 2. Site map with transects, rare species, and recommended access



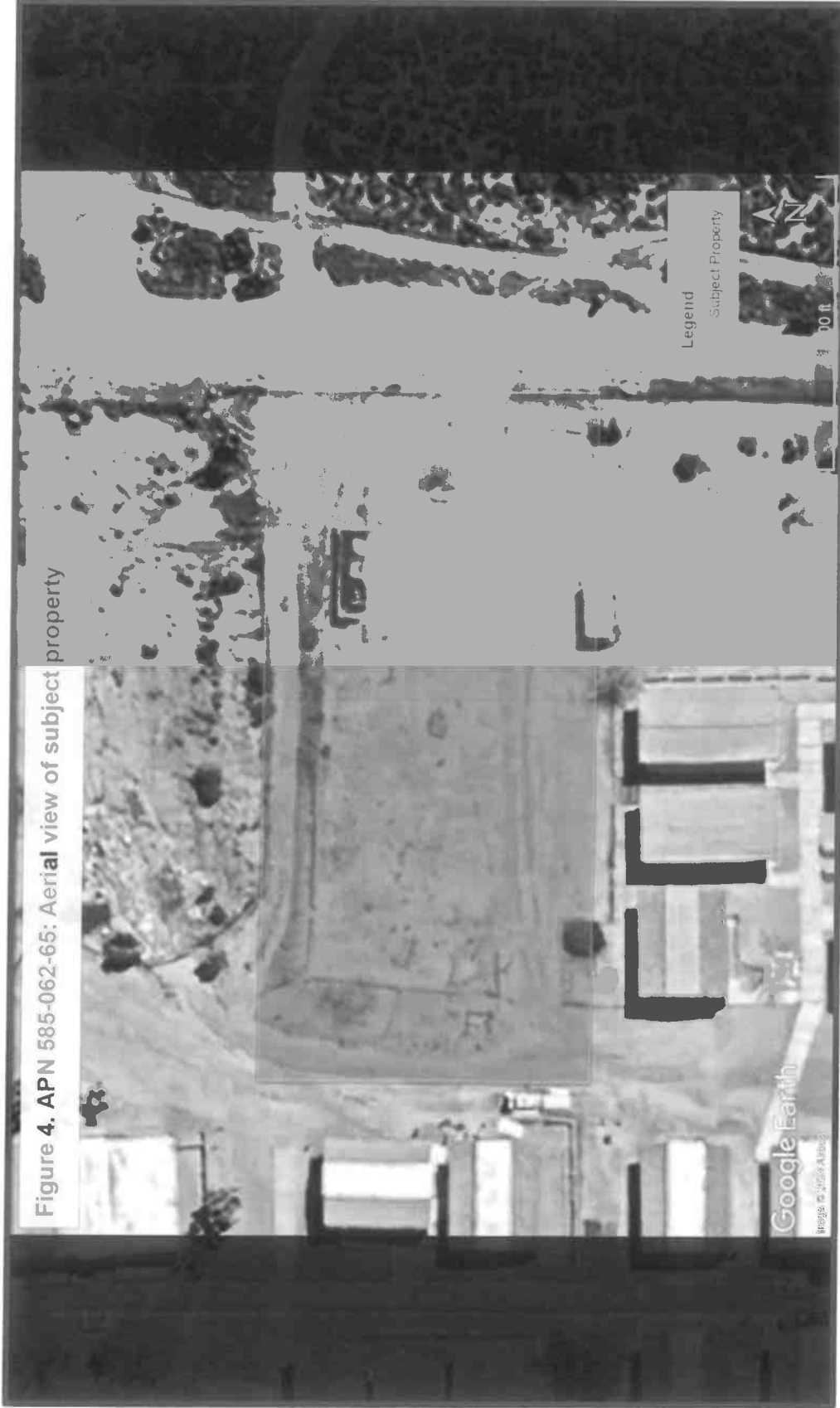
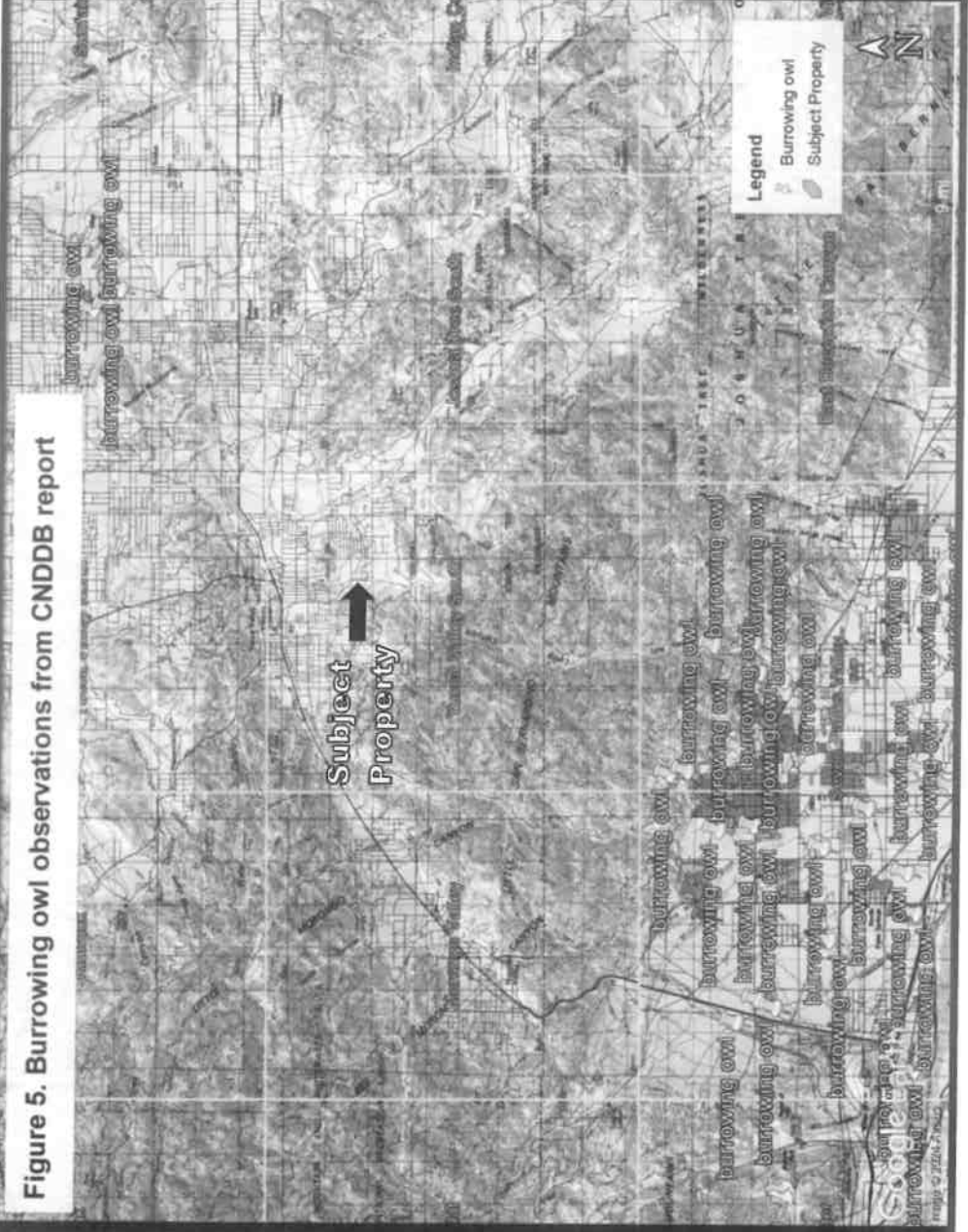


Figure 4. APN 585-062-65: Aerial view of subject property

Figure 5. Burrowing owl observations from CNDDB report



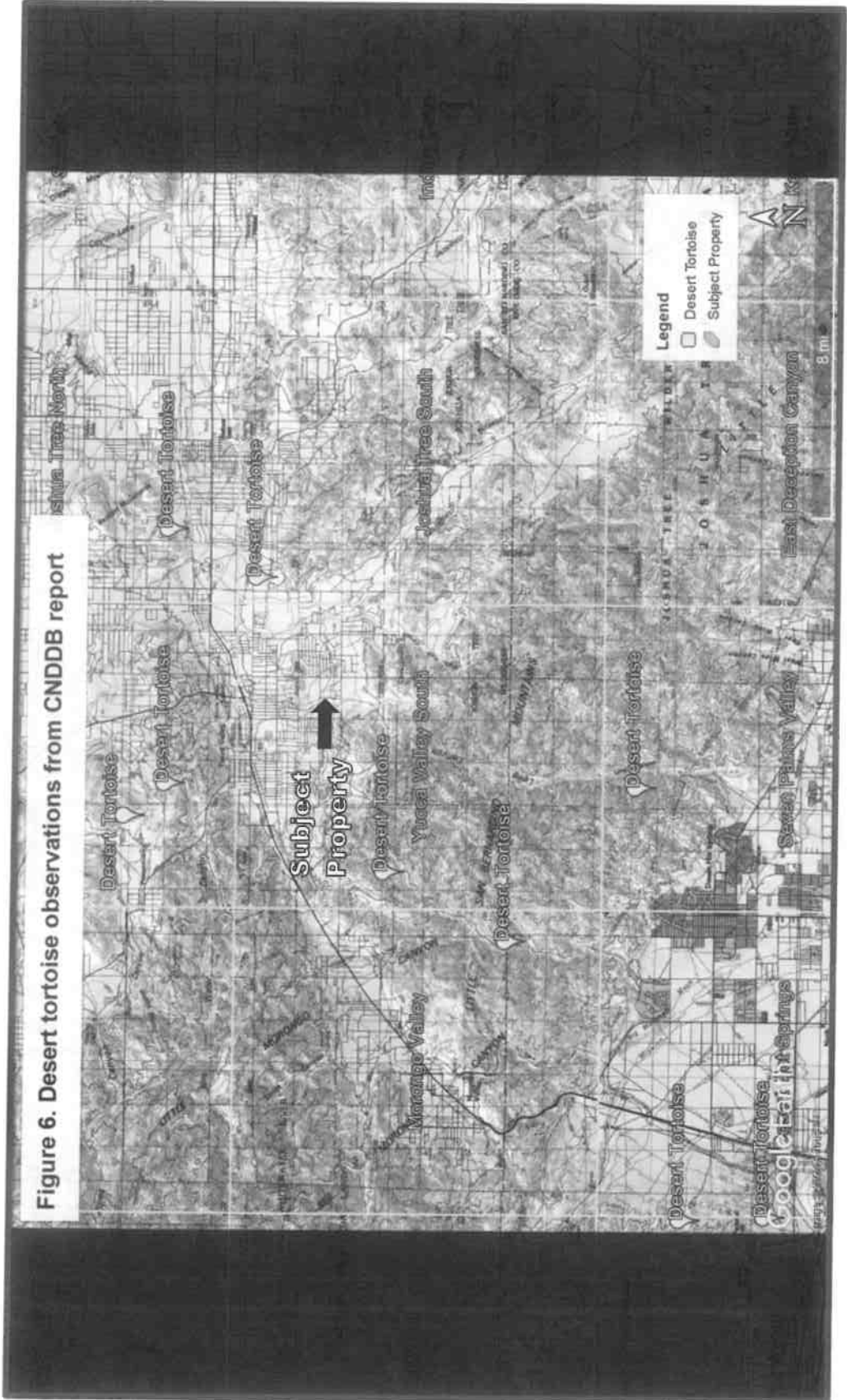


Figure 6. Desert tortoise observations from CNDDDB report

Executive Summary

Circle Mountain Biological Consultants, Inc. has contracted with NV5 on behalf of Joshua Springs Calvary (Proponent) to perform a focused survey for Agassiz's desert tortoise, habitat assessment for burrowing owl, and a general biological resource assessment on a parcel located in Yucca Valley, California (see Figures 1 and 2). The project area is a 0.6 acre± site within APN 585-062-65 and is located in the Town of Yucca Valley. The legal description for the subject property is Township 1 South, Range 5 East, a portion of Section 12, S.B.B.&M. The Proponent plans to build a gymnasium on the site.

For a total of 3.5 hours, between 8:00 a.m. and 11:30 a.m. on October 1, 2024, Susan Seville of CMBC and volunteer, John Myers, of Mariposa Biological Services surveyed the site and adjacent areas as described herein. This entailed a survey of 5 transects, spaced at 10-meter intervals and oriented in an east-west direction throughout the 0.6-acre± parcel. As depicted in Figure 2, five zone of influence transects were surveyed for detection of burrowing owls at 30-meter intervals in undeveloped areas to the east of the project area. Joshua trees were documented up to 50-feet from the boundary of the project area.

Based on ©2024 Google™ Earth elevations on the subject property range from approximately 1,101 meters (3,613 feet) at the north-west corner up to 1,102 meters (3,615 feet) at the north-east corner. The terrain is flat. Soils are sandy loam. No USGS-designated blue-line streams occur on-site. The 42 plant species identified during the survey are listed in Appendix A. The 2 reptile, 6 bird, and 5 mammal species identified during the survey are listed in Appendix B.

Based on the absence of tortoise sign on-site and in adjacent areas, and available information reviewed for this habitat assessment, CMBC concludes that tortoises are absent from the subject property. As such, no impacts are anticipated, and no mitigation measures are recommended.

CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: Crotch bumblebee, California legless lizard, Coast horned Lizard, LeConte's thrasher, burrowing owl, and prairie falcon. As such, no adverse impacts have been identified and no mitigation measures are recommended.

While Joshua trees were observed in the vicinity, including on other parts of APN 585-062-65, none occur within the project area. Twenty-seven Joshua trees were found within a 50-foot buffer of the site and could potentially be affected by the project. The results of this census must be submitted to the California Department of Fish and Wildlife. Per the Western Joshua Tree Conservation Act, "take" of Joshua trees must be authorized by permit through the City of Yucca Valley, and mitigation measures would potentially include fees and transplantation.

CMBC recommends construction traffic should be directed to use the eastern entrance to the site through the paved parking lot. Construction equipment and associated vehicles should not make use of the dirt road located immediately to the east of the property, so as to avoid impacts to additional Joshua trees on the road margins.

If it is necessary to commence project construction between March 15 and September 15, a qualified biologist should survey all shrubs and structures within the project site for nesting birds, prior to project activities (including construction and/or site preparation).

Table of Contents

Figure 1. APN 585-062-65: Vicinity Map.....	i
Figure 2. Site Map with transects & rare species locations and recommended access	ii
Figure 3. Results of CNDDDB search 5 miles around subject property	iii
Figure 4. APN 585-062-65: Aerial view of subject property	iv
Figure 5. Burrowing Owl observations reported from CNDDDB).....	v
Figure 6. Desert tortoise observations reported from CNDDDB.....	vi
Executive Summary	vii
1.0. Introduction.....	1
1.1. Purpose and Need for Study	1
1.2. Project Description.....	1
2.0. Methods	1
2.1. Literature Review.....	1
2.2. Field Survey.....	2
3.0. Results	3
3.1. Common Biological Resources	3
3.1.1. Common Flora	3
3.1.2. Common Fauna	4
3.2. Uncommon Biological Resources	4
3.2.1. Agassiz’s Desert Tortoise	4
3.2.2. Other Special Status Species.....	5
3.3. Other Protected Biological Resources	6
3.3.1. Protected Plant Species.....	6
4.0. Conclusions and Recommendations	7
4.1. Impacts to Agassiz’s Desert Tortoise and Proposed Mitigation.....	7
4.2. Impacts to Other Biological Resources and Proposed Mitigation.....	8
5.0. Literature References.....	10
Appendix A. Plant Species Detected	13
Appendix B. Animal Species Detected	16
Appendix C. Field data sheets completed on October 1, 2024.....	18
Appendix D. Photographic Exhibits (see Figure 5 for exhibit locations)	20
Appendix E. Summary Data for Joshua Trees.....	23

**Focused Survey for Agassiz's Desert Tortoise,
Habitat Evaluation for Burrowing Owl, and
General Biological Resource Assessment for a
0.6-acre± Site (APN 585-062-65) in the Town of Yucca Valley
San Bernardino County, California**

1.0. Introduction

1.1. Purpose and Need for Study. Circle Mountain Biological Consultants, Inc. (CMBC) has contracted with NV5 on behalf of Joshua Springs Calvary Chapel (Proponent) to perform a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessment for burrowing owl (*Athene cunicularia*), and a general biological resource assessment on a 0.6-acre± site located in the Town of Yucca Valley, San Bernardino County, California (see Figures 1 and 2). Given the location of the site within San Bernardino County and because the Town does not have specified guidelines for report preparation, this report has been prepared, in part, according to County of San Bernardino's *Report Protocol for Biological Assessment Reports* (County of San Bernardino 2006).

As the California Environmental Quality Act (CEQA) Lead Agency, the Town of Yucca Valley Planning Department (Town) is required to complete an initial study to determine if site development will result in any adverse impacts to rare biological resources. The information may also be useful to federal and State regulatory agencies, including U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), respectively, if the Lead Agency asks them to assess impacts associated with proposed development. Results of CMBC's focused tortoise survey, burrowing owl habitat assessment, and general biological resource assessment are intended to provide sufficient baseline information to these agencies to determine if significant impacts will occur and to identify mitigation measures, if any, to offset those impacts.

1.2. Project Description. The portion of APN 585-062-65 to be developed measures approximately 0.6 acres. The site is located in the Town of Yucca Valley. The legal description for the subject property is Township 1 South, Range 5 East, a portion of Section 12, S.B.B.&M. The Proponent plans to construct a 12,000 square-foot gymnasium and additional parking within the 0.6-acre± site.

2.0. Methods

2.1. In accordance with *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009), CMBC consulted the latest version of the California Natural Diversity Data Base (CDFW 2024a) for rare plant (and animal) records reported from the USGS 7.5' Yucca Valley south quadrangle, the eight quadrangles which encompasses the site were also searched, these are Joshua tree north, Joshua tree south, East Deception Canyon, Seven Palms Valley, Desert Hot Springs, Morongo Basin, Rim Rock, Yucca Valley North.

2.2. Field Survey.

2.2.1. *Survey and Habitat Assessment Protocols.* A significant paper was published in June 2011 (Murphy et al. 2011) whereby the “desert tortoise” of the Mojave Desert was split into two species, including *Gopherus agassizii*, referred to as “Agassiz’s desert tortoise,” and a newly described species, *G. morafkai*, referred to as “Morafka’s desert tortoise,” which occurs in the Sonoran Desert. According to Murphy et al. (2011), “...this action reduces the distribution of *G. agassizii* to only 30% of its former range. This reduction has important implications for the conservation and protection of *G. agassizii*, which may deserve a higher level of protection.” Then in 2016 (Edwards et al. 2016), a third species of tortoise was described, referred to as the “Goode’s Thornscrub Tortoise” (*Gopherus evgoodei*), which further reduced the perceived range of Morafka’s desert tortoise. Agassiz’s desert tortoise is the threatened species that occurs in the region surrounding the subject property.

For **Agassiz’s desert tortoise**, CMBC followed the most recent presence-absence tortoise survey protocol revised by the USFWS in 2019. USFWS (2019) protocol recommends surveying transects at 10-meter (30-foot) intervals throughout all portions of a given parcel and its associated action area. The *action area* is defined by regulation as all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action (50 CFR §402.02). For this site, the action area is the same as the subject property. Since the site is smaller than 500 acres, it may be surveyed year-round but there is no opportunity to estimate the density of tortoises on the 0.6-acre± subject property (USFWS 2019), particularly for this site where no tortoise sign was found.

For **burrowing owl**, although the formal habitat assessment does not specify a given interval to survey a site (Appendix C in CDFG 2012), subsequent breeding and nonbreeding studies identify that transects are surveyed at 7 to 20 meters (23 to 65 feet) apart, with five additional transects surveyed at 30-meter intervals out to 150 meters (500 feet) in adjacent areas in potential habitat (i.e., excluding areas substantially developed for commercial, residential, and/or industrial purposes) (Appendix D in CDFG 2012). With its narrower transect intervals, the tortoise survey is sufficient to cover the site for burrowing owl. The focus of the survey is to find and inspect all burrows sufficiently large to be used by burrowing owls. Importantly, this methodology is considered a formal *habitat assessment* for presence of burrowing owls, which can be conducted any time of the year. Had burrowing owl sign been found, which it was not, it would have then been necessary to perform breeding burrowing owl surveys during the spring and summer as outlined in CDFG (2012).

For **Joshua tree**, an evaluation of individual Joshua trees and Joshua tree woodland habitat (if present) was carried out according to census instructions pertaining to the Western Joshua Tree Conservation Act (Fish and Game Code section 1927.3, subdivision (a)(1)). Each western Joshua tree (WJT) found on the site and within 50 feet of the project area boundary was located using a hand-held GPS unit. The height class for each WJT was noted (Class 1: <1 m; Class 2: >1 m and < 5 m; Class 3: ≥ 5m). Each WJT was also classified as to its maturity. Mature trees are defined as trees which have produced flowers/fruits in the past. Each WJT was also photographed. Additional notes on the health of the tree were included, with a health rating of 1-3 (1 = Poor; 2= Average; 3= Good to Excellent).

2.2.2. *Field Survey Methods.* For a total of 2.5 hours, between 0800 and 1130 am on October 1, 2024, Susan Seville of CMBC and volunteer John Myers of Mariposa Biological Services surveyed the site, and adjacent areas as described herein. This entailed a survey of five transects, spaced at 10-meter (30-foot) intervals and oriented along an east-west axis throughout the 0.6-acre± parcel. As depicted in Figure 2, peripheral transects were surveyed for detection of burrowing owls at 30-meter (100-foot) intervals, where no suitable burrows were observed. Copies of CMBC’s data sheet completed in the field and USFWS’s (2019) pre-project survey data sheet are included in this report (see Appendix C).

Weather conditions recorded at the beginning and ending of the survey included temperatures measured approximately 5 centimeters (2 inches) above the ground, percent cloud cover, and wind speeds measured by a hand-held Kestrel® weather and wind speed meter, as reported in Table 1.

Date 2024	Begin to End = Total survey hours*	Weather Conditions	
		Beginning	Ending
10/1/24	0800 to 1130 X 2 = 5 hrs	84°F, 1 ↑ 2 mph, 10% cloud	96°F, 1 ↑ 2 mph, 5% cloud

*Total survey hours = 2.5 hours multiplied by two for the two biologists surveying the site = 5 hours.

All plant and animal species identified during the survey were recorded in field notes. Garmin® hand-held, global positioning system (GPS) units were used to survey straight-line transects and record Universal Transverse Mercator (UTM) coordinates (North American Datum – NAD 83) for property boundaries, rare species locations, and other pertinent information (Appendix C). A digital camera was used to take representative photographs (Appendix D), with locations and directions of exhibits shown in Figure 5. ©2024 Google™ Earth was accessed via the internet to provide available aerial photographs of the subject property and surrounding areas (Figure 4).

3.0. Results

3.1. Common Biological Resources. The common plant and animal species identified during the survey are listed in Appendices A and B, respectively. Based on ©2024 Google™ Earth elevations on the subject property range from approximately 1,101 meters (3,613 feet) at the north-west corner up to 1,102 meters (3,615 feet) at the north-east corner. The terrain is flat. Soils are sandy loam. No blueline streams designated by the U.S. Geological Survey (USGS) occur on-site.

3.1.1. *Common Flora.* The 42 plant species identified during the survey are listed in Appendix A. The entire site has been graded in the past, resulting in the absence of any native habitats on the site. The plant community found on the site is best characterized as non-native ruderal grassland and ornamental plants (some of which were native species). Adjacent areas are a mix of creosote bush scrub, Joshua tree woodland, and California juniper woodland.

3.1.2. *Common Fauna*. No wildlife species were found in the proposed area of construction. However, 2 reptile, 6 bird, and 5 mammal species were identified in adjacent areas during the buffer survey. These are listed in Appendix B. The two reptiles found during the survey were side-blotched lizard (*Uta stansburiana*) and western whiptail (*Cnemidophorus tigris*). Other locally common reptile species that may occur include zebra-tailed lizard (*Callisaurus draconoides*), long-nosed leopard lizard (*Gambelia wislizenii*), desert horned lizard (*Phrynosoma platyrhinos*), desert night lizard (*Xantusia vigilis*), red racer (*Masticophis flagellum*), glossy snake (*Arizona elegans*), gopher snake (*Pituophis melanoleucus*), long-nosed snake (*Rhinocheilus lecontei*), and various rattlesnake species (*Crotalus* spp.).

Bird species found during the buffer survey included cactus wren (*Campylorhynchus brunneicapillus*), mourning dove (*Zenaida macroura*), Eurasian collared-dove (*Streptopelia decaocto*), common raven (*Corvus corax*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*). Nearly all of these species are highly tolerant of or are benefited by human development.

Common desert mammals found in the vicinity of the project area include black-tailed hare (*Lepus californicus*), Audubon cottontail (*Sylvilagus audubonii*), antelope ground squirrel (*Ammospermophilus leucurus*), kangaroo rat (*Dipodomys* sp.), and coyote (*Canis latrans*).

3.2. Uncommon Biological Resources.

3.2.1. *Agassiz's Desert Tortoise*. No tortoise sign was found either on-site or in adjacent areas during this focused protocol survey for the species (USFWS 2019). Based on the absence of tortoise sign on the subject property, in adjacent areas, and reported from the region (see Figure 3), CMBC concludes that Agassiz's desert tortoise is absent from the subject property and action area. Also, there is no likelihood of wild tortoises entering the site from adjacent areas, either to pass through the site or establish residency.

With the publication of the Bureau of Land Management's (BLM) Record of Decision (BLM 2016), the Desert Renewable Energy Conservation Plan (DRECP) revised the 1980 California Desert Conservation Area Plan (CDCA Plan; BLM 1980) in significant ways for the conservation and recovery of desert tortoises in the California Deserts. Although desert tortoise critical habitat was not changed (USFWS 1994a), Desert Wildlife Management Areas (DWMAs; USFWS 1994b) and Multiple Use Classes on BLM lands were eliminated. In addition to critical habitat, the two main designated areas under the DRECP CDCA Plan amendment that provide for tortoise conservation and recovery are Areas of Critical Environmental Concern (ACECs) and California Desert National Conservation Lands (CDNCLs). The subject property is not found within any of these conservation areas.

3.2.2. *Other Special Status Species.* U.S. Fish and Wildlife Service (2008), California Department of Fish and Wildlife [CDFW 2024a for California Natural Diversity Data Base; 2024b for Special Plant Species list; 2024c for Special Animal Species list; and California Native Plant Society (CNPS 2024)] maintain lists of animals and/or plants considered rare, threatened, or endangered, which are herein collectively referred to as “special status species.” No special status species were identified on the survey. Regulatory agency-designated special status species other than desert tortoise that were identified using California Natural Diversity Data Base (CNDDB). Relevant locations from the CNDDB have been mapped in Figure 3. The following species have no suitable habitat in the vicinity of the project site and have been removed from further consideration: Parish’s daisy, Little San Bernardino Mountains linanthus, San Bernardino milkvetch, triple-ribbed milkvetch, Parish’s club cholla, and Mojave beardtongue.

California legless lizard (*Anniella stebbensi*) has been reported 2 miles southeast of the subject property (CDFW 2024a). The habitat on site is compacted and currently used as a parking lot/driveway and is not suitable habitat for the California legless lizard.

Coast horned lizard (*Phrynosoma blainvillii*), also known as “San Diego horned lizard,” is designated as a California Species of Special Concern, a BLM Sensitive species, and is not designated by the USFWS (CDFW 2024a). In the Coachella Valley, they appear to be restricted to the surrounding San Bernardino Mountains to the west and Little San Bernardino Mountains to the north, are apparently absent from the valley floor, and were not a Covered Species in the MSHCP. CDFW (2024a) describes their habitat as open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants. The only reported occurrences were from the Whitewater River in 1967 (CDFW 2024a). No suitable habitat is present and this species is considered absent from the subject property.

LeConte’s thrasher (*Toxostoma lecontei*) is designated as a California Species of Special Concern by CDFW (CDFW 2024c) and as a Bird of Conservation Concern by the USFWS (2008). The bird has been reported 4 miles north, 5 miles north, 5 miles east, and 7 miles east (CDFW 2024a), and there are both suitable nesting and foraging habitats throughout. LeConte’s thrashers may nest in several cactus species, particularly silver cholla (*Cylindropuntia echinocarpa*), and in larger streamside shrubs, and may forage in the nearby intact habitat but are expected to be absent from the subject property.

Prairie falcon (*Falco mexicanus*) is designated as a Watch List species by CDFW (2024c) and a Bird of Conservation Concern by the USFWS (2008). Although not observed during the survey, prairie falcons have been reported to the CNDDB (CDFW 2024a), which does not disclose the location of this species to protect nesting sites. There are no suitable nesting substrates (cliff faces and other inaccessible areas) onsite but foraging habitat exists in adjacent areas. The species may pass over the site but would not be expected to feed or nest on the site.

Crotch bumble bee (*Bombus crotchii*) is one of four species that in October 2018, the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and the Center for Food Safety submitted a petition to the California Fish and Game Commission to list the species as endangered under the California Endangered Species Act (CESA). Little is known about its occurrence in the area, except that it was reported 2 miles southeast of the subject property in 1968 (CDFW 2024a). It is unknown whether this species occurs in the vicinity of the project area.

Burrowing owl is designated as a California Species of Special Concern by CDFW (2024c), as a Bird of Conservation Concern by the USFWS (2008) and is considered Sensitive by the BLM (CDFW 2024a). It is one of the focal species specifically sought during field surveys, particularly in adjacent areas, and is usually detected by distinctive feathers, zygodactyl (x-shaped) tracks, and whitewash (fecal material deposited away from burrows may be from other bird species). Although pellets and feathers are sufficiently distinctive that they may be identified away from burrows, it is one or more of these signs at sufficiently large burrows that are the most definitive means of determining burrowing owl use of a given site. No burrowing owl, sign or sufficient burrows for habitation were observed on site or in the zone of influence, however, they have been reported 8 miles northeast, and 9 miles southwest of the subject property (CDFW 2024a). See Figure 6.

In the case of the subject property, there was no evidence of burrowing owl. The Nearest burrowing owl observation from the CNDDDB was 9 miles southwest and 8 miles northeast of the subject property. The species is considered absent from the subject property.

No **Joshua trees** were found on the project site, although some are present elsewhere on APN 585-062-65, and in adjacent areas. Seville recorded locations of 27 Joshua trees within 50 feet of the project area's eastern boundary using a Garmin global positioning system (GPS) unit, which has a horizontal accuracy of 2 to 3 meters. The tabulated information for each of these Joshua trees is included in an attached Excel spread sheet along with photos of each Joshua tree, comprising Appendix E.

3.3. Other Protected Biological Resources.

3.3.1. *Protected Plant Species.* At the Town level, the following information is taken from an undated brochure, entitled *Town of Yucca Valley, Before You Remove Native Vegetation, What You Need To Know About "Protected Native Plants."* This brochure reiterates regulations for protecting a variety of native plants identified in Town Ordinance No. 140 of 2003. Compliance with the Native Plant Protection and Management ordinance helps promote the continued health of the Town's abundant and diverse plant resources by not allowing the indiscriminate removal, and to further promote the protection of native plants and their relationship to the identity of the Town.

Regulated Desert Native Plants include:

- All species of genus *Prosopis* (mesquites): stems 2" & greater in diameter or 6' or greater in height.
- Creosote rings (10' or greater in diameter).

- All species of yuccas, including those commonly found in Yucca Valley:
 - Mojave yucca (*Yucca shidigera*)
 - Chaparral yucca (*Yucca whipplei*)
 - Joshua trees (*Yucca brevifolia*)
- California juniper (*Juniperus californica*)
- Desert willow (*Chilopsis linearis*)
- Piñon pine (*Pinus monophylla*)
- Palo verde (*Cercidium* sp.) [excluding Mexican palo verde (*Parkinsonia aculeata*), which is not native to California]
- Manzanita (*Arcostaphylos* sp.)
- Additional plants protected or regulated by the California Desert Native Plants Act.

At the State level, the 1998 Food and Agricultural Code, Division 23: California Desert Native Plants, Chapter 3: Regulated Native Plants Act, Section 80073 states: The following native plants, or any parts thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

- (a) All species of the family Agavaceae (century plants, nolin, yuccas).
- (b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 (i.e., saguaro and barrel cacti), which may be harvested under a permit obtained pursuant to that section.
- (c) All species of the family Fouquieriaceae (ocotillo, candlewood).
- (d) All species of the genus *Prosopis* (mesquites).
- (e) All species of the genus *Cercidium* (palo verdes).
- (f) *Senegalia* (*Acacia*) *greggii* (catclaw acacia).
- (g) *Atriplex hymenelytra* (desert holly).
- (h) *Dalea* (*Psoralea*) *spinosa* (smoke tree).
- (i) *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

Joshua trees are protected under the West Joshua Tree Conservation Act and are discussed elsewhere. Desert willow is the sole plant species included in one or both above lists that were observed on the subject property. However, the single desert willow found on the property is located along a driveway and appears to be an ornamental planting.

4.0. Conclusions and Recommendations

4.1. Impacts to Agassiz's Desert Tortoise and Proposed Mitigation. Based on the absence of tortoise sign on-site and in adjacent areas, and available information reviewed for this habitat assessment, CMBC concludes that tortoises are absent from the subject property. As such, no impacts are anticipated, and no mitigation measures are recommended.

Whereas USFWS survey protocols historically indicated that the results of a given survey were valid for the period of only one year (USFWS 2010 and 2018), according to the revised, 2019 USFWS pre-project survey protocol, “*If the survey data are more than a year old, we encourage project proponents to contact us at the earliest possible time to allow us to assess the specific circumstances under which the data were collected (e.g.,*

time of year, drought/rainfall conditions, size and location of the site, etc.) and to discuss whether additional surveys would be appropriate. Spatial information can be provided in pdf and GIS formats.” At the time of this writing, the Palm Springs office of the USFWS would be the appropriate office to contact [760] 322-2070] to determine if another survey should be performed prior to ground disturbance, if it does not occur before October 2025.

Regardless of survey results and conclusions given herein, tortoises are protected by applicable State and federal laws, including the California Endangered Species Act and Federal Endangered Species Act, respectively. As such, if a tortoise is found on-site at the time of construction, all activities likely to affect that animal(s) should cease and the Town contacted to determine appropriate steps.

It is our understanding that the Town routinely requires pre-disturbance clearance surveys within 30 days of grubbing vegetation, so that survey will be an opportunity to confirm that tortoises are still absent immediately prior to construction.

Importantly, nothing given in this report, including recommended mitigation measures, is intended to authorize the incidental take of Agassiz’s desert tortoises during site development. Such authorization must come from the appropriate regulatory agencies, including CDFW (i.e., authorization under section 2081 of the Fish and Game Code) and USFWS [i.e., authorization under section 10(a)(1)(B) of the Federal Endangered Species Act].

4.2. Impacts to Other Biological Resources and Proposed Mitigation.

4.2.1 *Other Special Status Species.* Based on the field survey and habitat assessment, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: Crotch bumblebee, California legless lizard, Coast horned Lizard, LeConte’s thrasher, burrowing owl, and prairie falcon. As such, no adverse impacts have been identified and no mitigation measures are recommended.

While Joshua trees were observed in the vicinity, none occur on the subject property. Twenty-seven Joshua trees were found within a 50-foot buffer of the site and could potentially be affected by the project. The results of this census must be submitted to the California Department of Fish and Wildlife. Per the Western Joshua Tree Conservation Act, “take” of Joshua trees must be authorized by permit through the City of Yucca Valley, and mitigation measures would potentially include fees and transplantation.

CMBC recommends construction traffic should be directed to use the eastern entrance to the site through the paved parking lot. Construction equipment and associated vehicles should not make use of the dirt road located immediately to the east of the property, so as to avoid impacts to additional Joshua trees on the road margins.

4.2.2.b. Protected Plants. It is beyond the scope of this focused survey and general resource assessment to provide necessary baseline data and a proposed program to minimize and mitigate impacts to protected native desert plants. The Town typically requires a Desert Native Plant Assessment to identify the numbers and locations of protected plants to be in compliance with the California Native Plant Protection Act. The only plants found on the site that would be included in these lists is a one desert willow, this is likely an ornamental planting. (Typically, desert willows occur in wash environments under wild conditions and would not be found in upland areas such as the project site.) CMBC recommends that the City be consulted about the need to protect this tree.

4.2.2.c. Bird Nests. Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests, including raptors and other migratory nongame birds (As listed under the Migratory Bird Treaty Act). Typically, CDFW requires that vegetation not be removed from a project site between March 15 and September 15 to avoid impacts to nesting birds. If it is necessary to commence project construction between March 15 and September 15, a qualified biologist should survey all shrubs and structures within the project site for nesting birds, prior to project activities (including construction and/or site preparation).

Surveys should be conducted at the appropriate time of day during the breeding season, and surveys would end no more than three days prior to clearing. CDFW is typically notified in writing prior to the start of the surveys. Documentation of surveys and findings should be submitted to the CDFW within ten days of the last survey. If no nesting birds were observed project activities may begin. If an active bird nest is located, the plant in which it occurs should be left in place until the birds leave the nest. No construction is allowed near active bird nests of threatened or endangered species. As given above, the preconstruction survey to be performed within 30 days of ground disturbance is the ideal opportunity to look for and avoid nesting birds.

5.0. Literature References

- Beauchamp, R. 1986. *A Flora of San Diego County, California*. Sweetwater River Press. National City, CA.
- California Department of Fish and Game (CDFG). 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. California Natural Resources Agency, Department of Fish and Game, 24 November 2009. Sacramento, CA.
- California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. 7 March 2012 memo replacing 1995 staff report, State of California Natural resources Agency, Department of Fish and Game. Sacramento, CA.

- California Department of Fish and Wildlife. 2024a. Electronic database of rare plant and animal species reported to The State Resources Agency, Natural Heritage Division, California Natural Diversity Data Base. Updated monthly. Sacramento, CA.
- California Department of Fish and Wildlife, Natural Diversity Database. 2024b. Special Vascular Plants, Bryophytes, and Lichens List. Plant species list published and updated quarterly by State of California, The Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Data Base. Dated January 2024. Sacramento, CA.
- California Department of Fish and Wildlife, Natural Diversity Database. 2024c. Special Animals. Animal species list published and updated by State of California, The Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Data Base. Dated January 2024. Sacramento, CA.
- California Native Plant Society (CNPS). 2024. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society. Sacramento, CA.
- Circle Mountain Biological Consultants, Inc. 2013. Desert tortoise detection in the Morongo Basin on 270 sites between 1989 and 2013. Unpublished report presented as a technical paper at the 2013 Desert Tortoise Council Symposium. Wrightwood, CA.
- County of San Bernardino (County). 2004. Standards for assessing impacts to the desert tortoise and Mohave ground squirrel. Unpublished protocol provided by the County of San Bernardino, Public and Support Services Group, Land Use Services Department, Advance Planning Division, dated December 2004. San Bernardino, CA.
- County of San Bernardino. 2006. Report protocol for biological assessment reports. Unpublished protocol provided by the County of San Bernardino, Public and Support Services Group, Land Use Services Department, Advance Planning Division, dated 31 August 2006. San Bernardino, CA.
- eBird. 2024. An on-line database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available: <http://www.ebird.org>
- Edwards, T., A. Karl, M. Vaughn, P. Rosen, C. Melendez Torres, and R. Murphy. 2016. The desert tortoise trichotomy: Mexico hosts a third, new sister-species of tortoise in the *Gopherus morafkai*-*G. agassizii* group. *ZooKeys* 563: 131-158.
- Hickman, J. Editor. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, CA.
- Holland, R. 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Sacramento, CA.

- Ingles, L. 1965. *Mammals of the Pacific States: California, Oregon, Washington*. Stanford University Press. Stanford, CA.
- Jaeger, E. 1969. *Desert Wild Flowers*. Stanford University Press. Stanford, CA.
- Munz, P. 1974. *A Flora of Southern California*. University of California Press. Berkeley, CA.
- Murphy, R. W., K. H. Berry, T. Edwards, A. E. Leviton, A. Lathrop, and J. D. Riedle. 2011. The dazed and confused identity of Agassiz's desert tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. *ZooKeys* 113: 39–71.
- Sawyer, J., J. Evens and T. Keeler-Wolf. 2009. *A Manual of California Vegetation*. 2nd edition. California Native Plant Society. Sacramento, CA .
- Sibley, D. 2000. National Audubon Society, the Sibley Guide to Birds. First Edition. New York, N.Y.
- Stebbins, R. 2003. *A Field Guide to Western Reptiles and Amphibians*. Third Edition. The Peterson Field Guide Series. Houghton Mifflin Company. New York, NY.
- Tierra Madre Consultants, Inc. (TMC) 1989. 160-acre Pipes Road Property: Biological assessment. Unpublished report completed by Ed LaRue on behalf of Jeffries and Associates. Job 89-043. Riverside, CA. (Reconnaissance survey, performed prior to development of protocol surveys).
- U.S. Bureau of Land Management (BLM). 2005. Final Environmental Impact Report and Statement for the West Mojave Plan, a Habitat Conservation Plan and California Desert Conservation Area Plan Amendment. Moreno Valley, CA.
- U.S. Bureau of Land Management. 2006. Record of Decision: West Mojave Plan, Amendment to the California Desert Conservation Area Plan, dated March 2006. Sacramento, CA.
- U.S. Bureau of Land Management. 2016. Record of Decision for the Land Use Plan Amendment to the California Desert Conservation Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan for the Desert Renewable Energy Conservation Plan (DRECP). Dated September 2016. Sacramento, CA.
- U.S. Fish and Wildlife Service (USFWS). 1992. Field survey protocol for any nonfederal action that may occur within the range of the desert tortoise. Ventura, CA.

- U.S. Fish and Wildlife Service. 1994a. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. Federal Register 55(26):5820-5866. Washington, D.C.
- U.S. Fish and Wildlife Service. 1994b. Desert Tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. Pp. 73, plus appendices.
- U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern. Division of Migratory Bird Management. Arlington, VA.
- U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.
- U.S. Fish and Wildlife Service. 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.
- U.S. Fish and Wildlife Service. 2019. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White (Editors). 1990. California's Wildlife. Volume III. Mammals. California Statewide Wildlife Habitat Relationships System. State of California. The Resources Agency. Department of Fish and Game. Sacramento, California.

Appendix A. Plant Species Detected

The following plant species were identified on-site during the focused floral inventory described in this report. Protected plant species are highlighted in red and signified by “(PPS)” following the common names. The 26 species found only in adjacent areas are signified by “+.”

CONIFERAE

Cupressaceae

+*Juniperus californica*

GNETAE

Ephedraceae

+*Ephedra californica*

ANGIOSPERMAE: DICOTYLEDONES

Amaranthaceae

**Amaranthus albus*

Asteraceae

+*Ambrosia acanthicarpa*

+*Ambrosia dumosa*

+*Ambrosia salsola*

+*Baccharis sarothroides*

Baileya multiradiata

+*Bebbia juncea*6t

+*Chaenactis fremontii*

Bignoniaceae

Chilopsis linearis ssp. *arcuata*

Boraginaceae

+*Amsinckia tessellata*

+*Cryptantha* sp.

Brassicaceae

**Brassica tournefortii*

**Sisymbrium irio*

Cactaceae

Cylindropuntia acanthicarpa

+*Cylindropuntia ramosissima*

CONE-BEARING PLANTS

Cypress family

California juniper (PPS)

GNETAE

Joint-fir family

Desert tea

DICOT FLOWERING PLANTS

Amaranth family

White tumbleweed

Sunflower family

Annual bur-sage

Burrobush

Cheesebush

Baccharis

Marigold

Sweetbush

Desert pincushion

Bigonia family

Desert willow (PPS)

Borage family

Fiddleneck

Forget-me-not

Mustard family

Saharan mustard

London rocket

Cactus family

Staghorn cholla (PPS)

Pencil cholla (PPS)

+*Echinocereus engelmannii*

+*Opuntia basilaris*

Hedgehog cactus (PPS)

Beavertail cactus (PPS)

Chenopodiaceae

+**Salsola tragus*

Goosefoot family

Russian thistle

Cleomaceae

+*Peritoma (Isomerus) arborea*

Caper family

Bladderpod

Euphorbiaceae

Euphorbia albomarginata

Euphorbia micromeria

Spurge family

Rattlesnake weed

Prostrate spurge

Fabaceae

Parkinsonia aculeata

+*Psoralea argophylla*

+*Senna armata*

Pea family

Mexican palo verde

Indigo bush

Senna

Geraneaceae

+**Erodium cicutarium*

Geranium family

Red-stemmed filaree

Krameriaceae

+*Krameria (grayi) bicolor*

Krameria family

White rhatany

Lamiaceae

+*Salvia columbariae*

Mint family

Chia

Malvaceae

+*Sphaeralcea ambigua*

Mallow family

Desert mallow

Plantaginaceae

+*Plantago ovata*

Plantain family

Plantain

Polemoniaceae

Eriastrum sp.

Phlox family

Woolly star

Polygonaceae

Eriogonum sp.

+*Eriogonum fasciculatum*

Buckwheat family

Buckwheat

California buckwheat

Solanaceae

+*Lycium cooperi*

Nightshade family

Peach thorn

Zygophyllaceae

Larrea tridentata

Caltrop family

Creosote bush

Liliaceae

Agave parryi

+ *Yucca brevifolia*

+ *Yucca schidigera*

Poaceae

* *Bromus madritensis* ssp. *rubens*

* *Bromus tectorum*

* *Schismus* sp.

Lily family

Perry's Agave (Cultivated)

Joshua tree (PPS)

Mojave yucca (PPS)

Grass family

Red brome

Cheat grass

Split-grass

* - indicates a non-native (introduced) species.

c.f. - compares favorably to a given species when the actual species is unknown.

Some species may not have been detected because of the seasonal nature of their occurrence. Common names are taken from Beauchamp (1986), Hickman (1993), Jaeger (1969), and Munz (1974).

Appendix B. Animal Species Detected

The following animal species were detected during the general biological inventory described in this report. Special status animal species are highlighted in red and signified by “(SSA)” following the common names. Those only found in adjacent areas are signified by “+.”

REPTILIA

Iguanidae

+*Uta stansburiana*

Teiidae

+*Cnemidophorus tigris*

AVES

Columbidae

+*Streptopelia decaocto*

+*Zenaida macroura*

Corvidae

+*Corvus corax*

Troglodytidae

+*Campylorhynchus brunneicapillus*

Fringillidae

+*Carpodacus mexicanus*

Passeridae

+*Passer domesticus*

MAMMALIA

Leporidae

+*Lepus californicus*

+*Sylvilagus audubonii*

Sciuridae

+*Ammospermophilus leucurus*

Heteromyidae

+*Dipodomys* sp.

REPTILES

Iguanids

Common side-blotched lizard

Whiptails

Western whiptail

BIRDS

Pigeons and doves

Eurasian collared-dove

Mourning dove

Crows and jays

Common raven

Wrens

Cactus wren

Finches

House finch

Weavers

House sparrow

MAMMALS

Hares and rabbits

Black-tailed hare

Audubon cottontail

Squirrels

Antelope ground squirrel

Pocket mice

Kangaroo rat

Canidae
+*Canis latrans*

Foxes, wolves, and coyotes
Coyote

Nomenclature follows Stebbins, *A Field Guide to Western Reptiles and Amphibians* (2003), third edition; Sibley, National Audubon Society, the Sibley Guide to Birds (2000), first edition; and Ingles, *Mammals of the Pacific States* (1965), second edition.

Appendix C. Field Data Sheets Completed on October 1, 2024

The USFWS and County recommend that consultants include copies of field data sheets from which the results and conclusions given in their reports are derived. As such, copies of the data sheets completed by Seville on October 1, 2024, follow.

Version: October 8, 2019

Date of survey: 10/1/2024 Survey biologist(s): Susan Seville
(day, month, year) (name, email, and phone number)

Site description: Joshua Springs Calvary Chapel
(project name and site general location)

County: San Bernardino Quad: Little Valley, South Location: 119
(UTM coordinates, latitude, and/or TRS, map datum)

Circle one: 100% coverage or Sampling Area size to be surveyed: 0.6 ha Transect #: 5 Transect length: 530m

GPS Start-point: 119 554270 3772958 Start time: 11:15 am/pm
(easting, northing, elevation in meters)

GPS End-point: 119 554341 3772994 End time: 11:30 am/pm
(easting, northing, elevation in meters)

Start Temp: 81 °F End Temp: 96 °F

Live Tortoises

Detection number	GPS location Easting - Northing	Time	Tortoise location <small>(in burrow, at tortoise basking, edge of burrow opening, or not in burrow)</small>	Approx. MCL ≥180 mm? <small>(Y/N, No or Unknown)</small>	Existing tag # and color, if present
1					
2					
3					
4					
5	NA				
6					
7					
8					

Tortoise Sign (burrows, scats, carcasses, etc)

Detection number	GPS location Easting - Northing	Type of sign <small>(burrows, scats, carcass, etc)</small>	Description and comments
1			
2			
3			
4			
5			
6			
7			
8			

22 of 22
 Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*)

JOB #/NAME	DATE	DRIVE TIME		MILES	FIELD TIME		SURVEYORS		
Calvary Chapel	10/1/24	TO	FROM		BEGIN	END	S. Smith B. Myers		
WEATHER CONDITIONS (Start/End)		TEMP: 84°F WIND X: 1 ↑ 2. NSEW CLOUD: 10%			UTM (NAD 83) (circle starting corner)				
TEMP: 94°F WIND X: 1 ↑ 2. NSEW CLOUD: 5%					NE→	NW→	SE→	SW→	
					554241	554270	554241	554270	
					3772084	3772084	3772050	3772050	
PERENNIAL PLANTS		ANNUAL PLANTS		BIRDS	HERP	MAM			
Culch	Ech cog	Amadib	Ambelun	MOON		AGS			
Chil in	EPical	Amban	Amb Sel			BTH			
Chl ram	Eri las	Am mal	Am Is			CTR			
Jun Cal	Km ene	Big tou	Big jun						
Kar tri	Opu bas	Bro Rub	Chl fre						
Pac flo	Pso thn	Broca	Sal cal						
Agg br	Scu Mey	Eri det	Spn gic						
	Sen ara	Eri bra	Eri ca						
	Yac her	Eup me					Photographs		
	Yac Sh	Eup mb					SW NE	4270	2950
	Exc Star	Sal tra					SE NW	4341	2950
		Sis in					NW SE	4341	2984
		Shi sp					NE SW	4270	2984
OBSERVABLE HUMAN DISTURBANCES									
T#	East	North	OHV	Road	Dog	Dump	S Gun	Rifle	Target
1	4270	2950							
3	4270	2970							
5	4270	2984							
entire site is graded with Road along fence line									
1	554271	377201	2020						
2	554281	377204	2020	1					
3	554291	377204	2020						
4	554301	377204	2020			1			
5	554311	377204	2020						

Topography and soils:

Appendix D. Photographic Exhibits

Locations of the four photographic exhibits on the next two pages are depicted in Figure 5 with red arrows.



Exhibit 1. View from the southwest corner of the parcel, facing northeast (see Figure 5 for locations and directions of photographs).

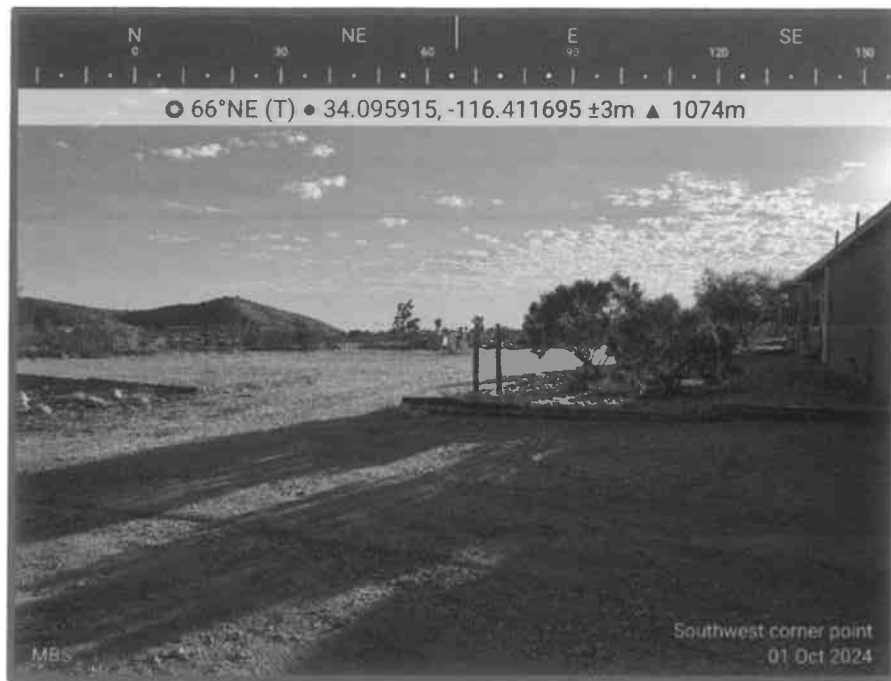


Exhibit 2. View from the northwest corner of the parcel, facing southeast.



Exhibit 3. View from the northeast corner of the parcel, facing southwest.

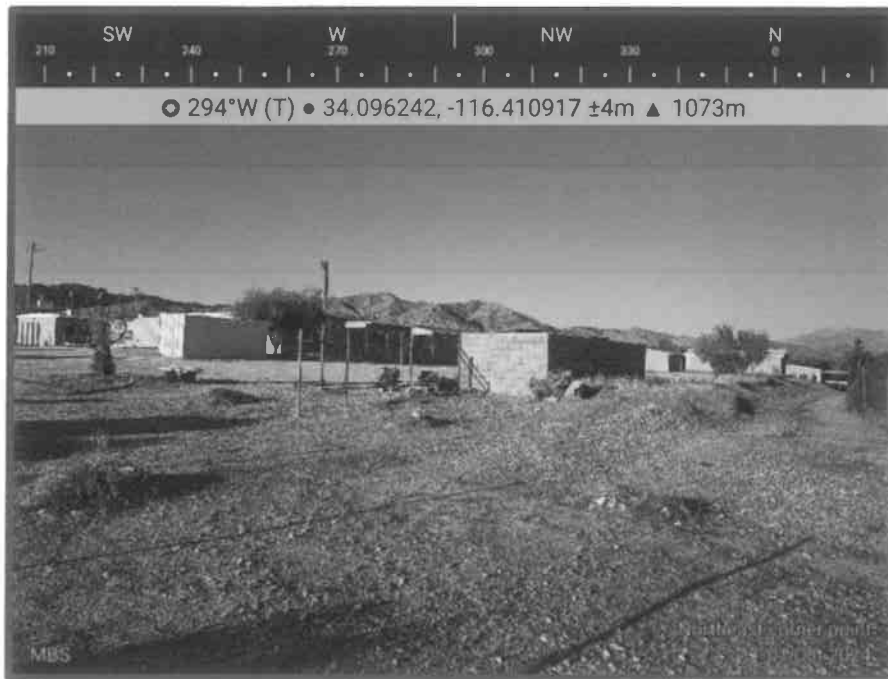


Exhibit 4. View from southeast corner of the parcel, facing northwest.



APPENDIX E. DATA FOR JOSHUA TREE OBSERVATIONS (NAD 83)

These data pertain to all trees onsite and those with 50 feet of the boundary

Size Class: A = < 1m; B = 1-5m; C = > 5m

Phenology: Fr = Fruit; Fl = Flowers; N = Neither/none

Mature trees are those that have branched, Y = yes, N = no

#	East	North	Size Class	Height	Live or Dead	Phenology	Mature Tree?	Image
1	4256	2986	C	5.1	L	Fr	Y	
2	4270	3006	B	3.6	L	Fr	Y	
3	4201	3005	C	5.2	L	Fr	Y	
4	4270	3011	B	5	L	Fr	Y	
5	4270	3011	A	0.6	L	N	N	5 Trunk, all sprouted from a cut trunk
6	4271	3008	A	0.2	L	N	N	
7	4332	2934	A	0.2	L	N	N	
9	4326	2935	A-B	0.3-1.5	L	N	N	4 Trunk
10	4328	2932	A	0.2	L	N	N	
11	4328	2937	A	0.1	L	N	N	
12	4328	2939	A	0.1	L	N	N	
16	4334	2926	A	0.6	L	N	N	
17	4334	2926	A	0.1	L	N	N	2 Trunk
18	4339	2991	C	6.7	L	Y	Y	
19	4357	2999	B	2.4	L	Fr	N	
20	4358	2997	A	0.1	L	N	N	
21	4358	2997	C	5.2	L	Fr	Y	
22	4352	2993	A	0.7	L	N	N	
23	4352	2992	A-B	0.3-4.6	L	N	N	4 Trunk
24	4351	2989	A-B	0.2-4.8	L	Y	Y	5 Trunk
25	4352	2988	A	0.3	L	N	N	
26	4351	2986	A	0.3	L	N	N	
27	4353	2988	A	0.3	L	N	N	
28	4353	2988	B	3.3	L	Fr	Y	
29	4355	2987	A	0.6	L	N	N	
30	4349	2953	B	3.0	L	N	Y	
31	4354	2939	B	3.1	L	Fr	Y	

- Corresponds to both tree number and photo number.

