

**Focused Survey for Agassiz's Desert Tortoise,  
Habitat Assessments for Burrowing Owl,  
General Biological Resource Assessment, and Western Joshua Tree Census for a  
10-acre Site (APNs 069-282-03 & 069-282-06) in the Community of Landers,  
San Bernardino County, California**

(U.S. Geological Survey 7.5' Landers Quadrangle,  
Township 2N, Range 5E, the NW ¼ of the SW ¼ of the NE ¼  
(Lots 37 & 38) of Section 10, S.B.B.&M)

**Job#: 25-036**

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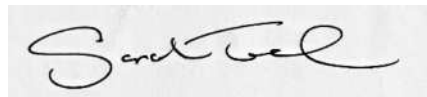
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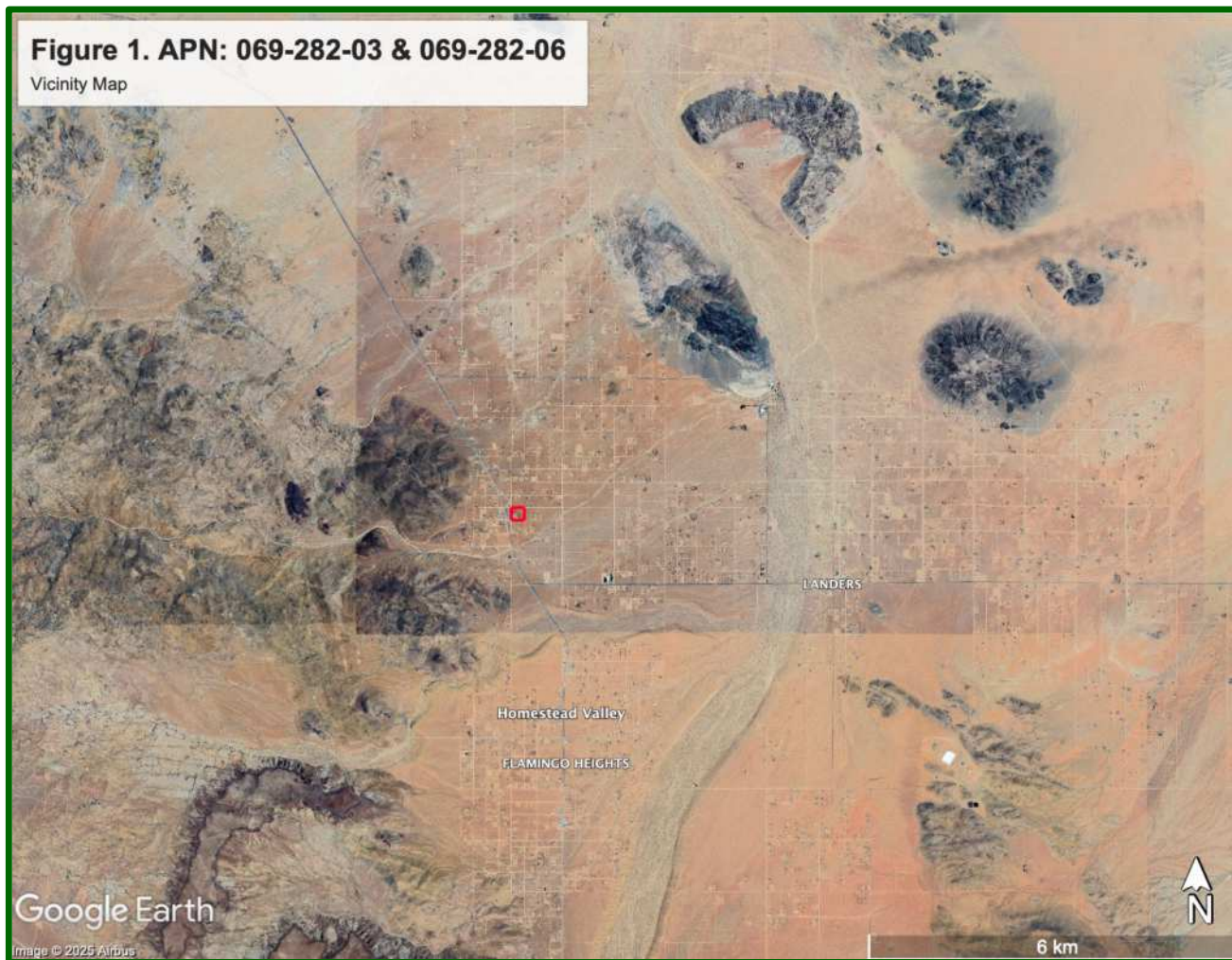
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I hereby certify that the statements furnished herein, including attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best 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.  
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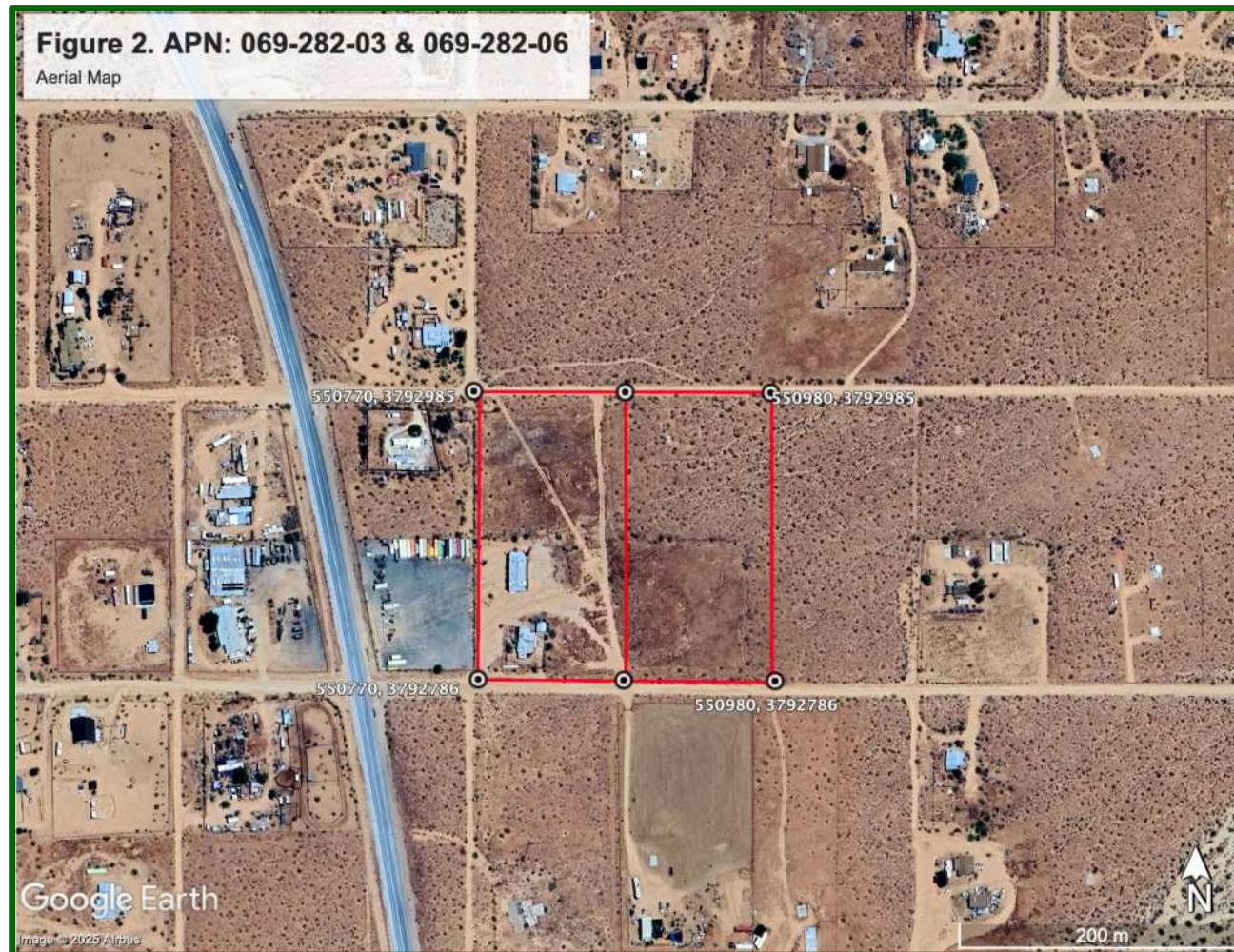


November 2025

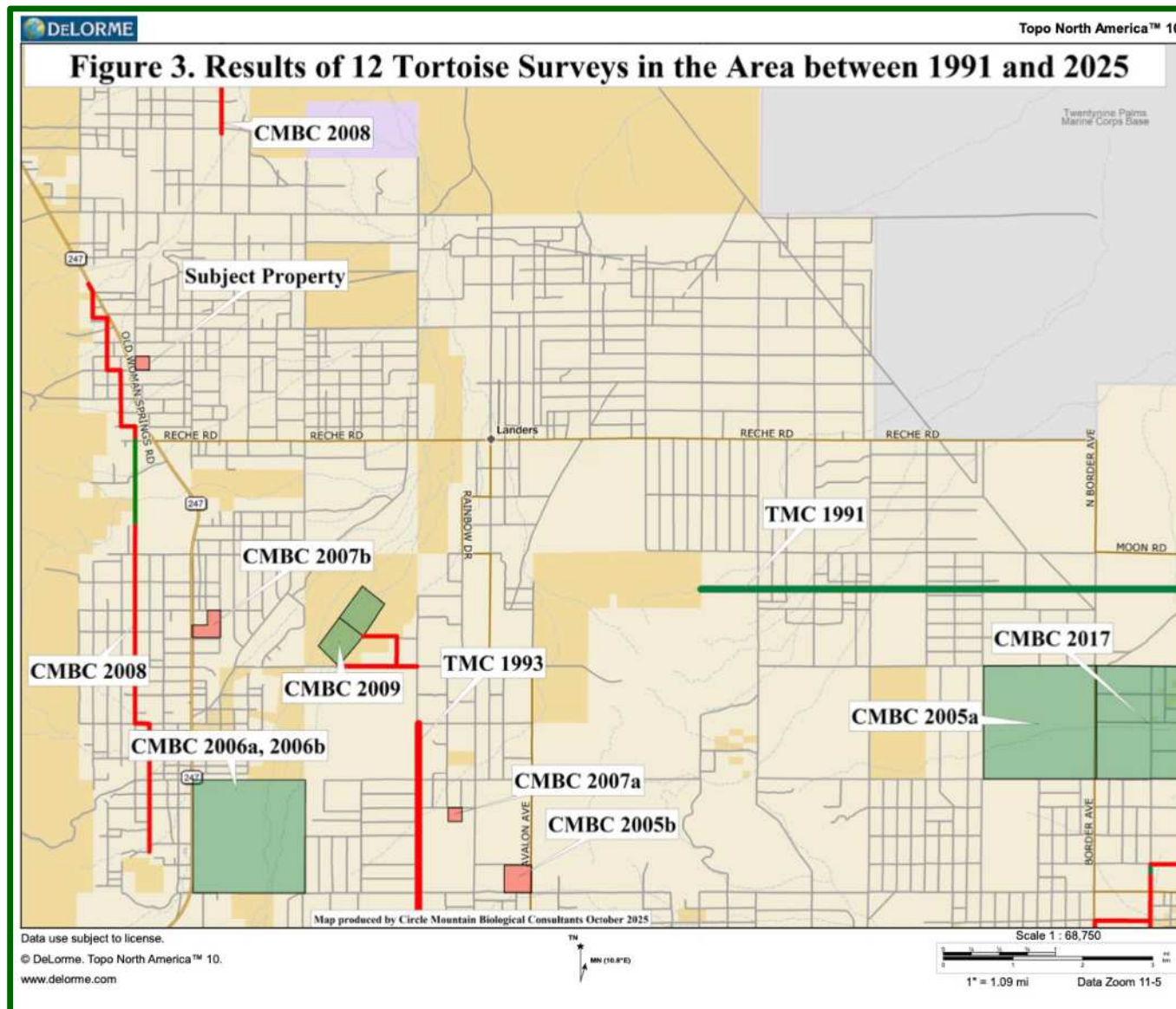


**Figure 1. Vicinity Map (Google Earth 2025)**

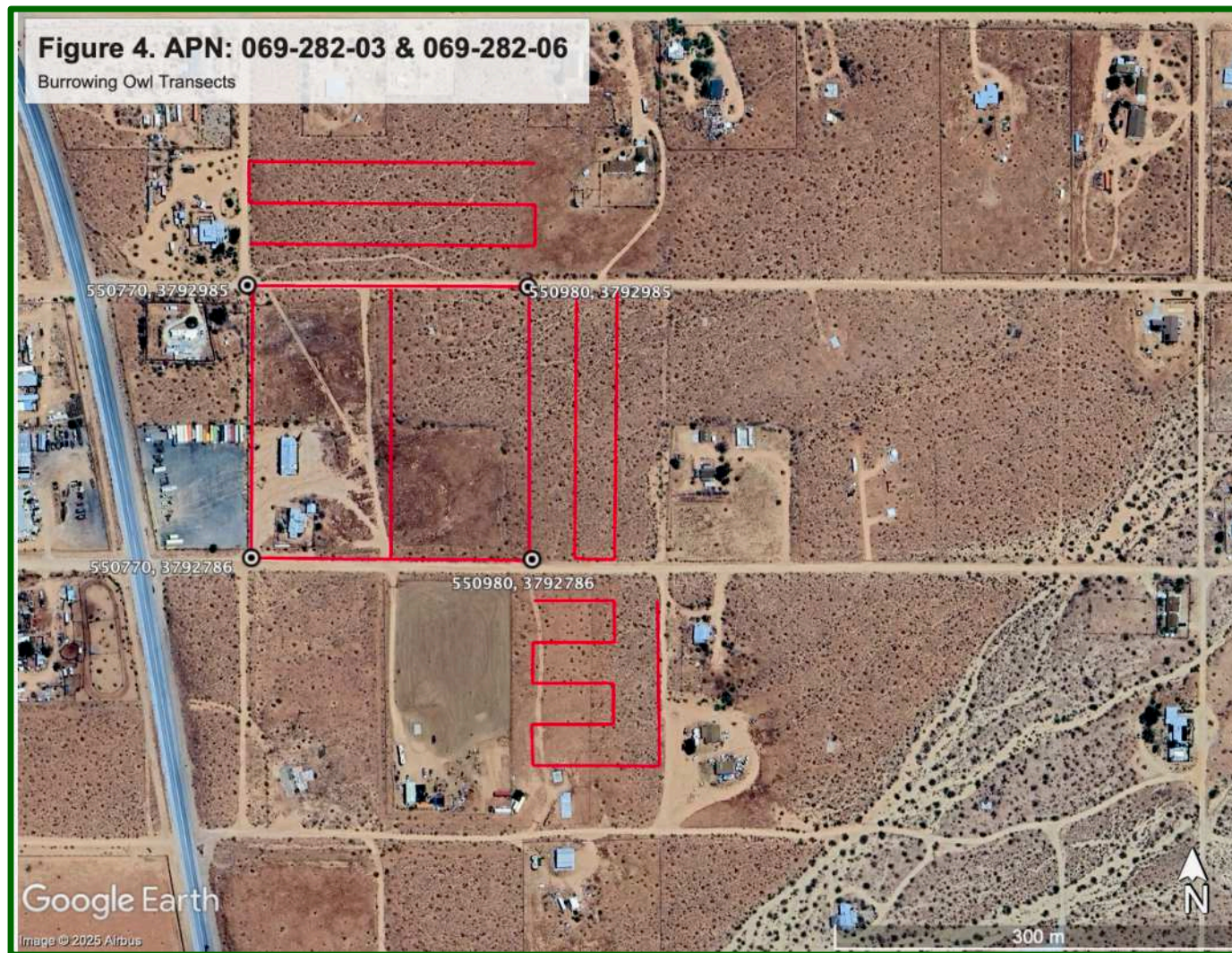




**Figure 2. Aerial Map (Google Earth 2025)**

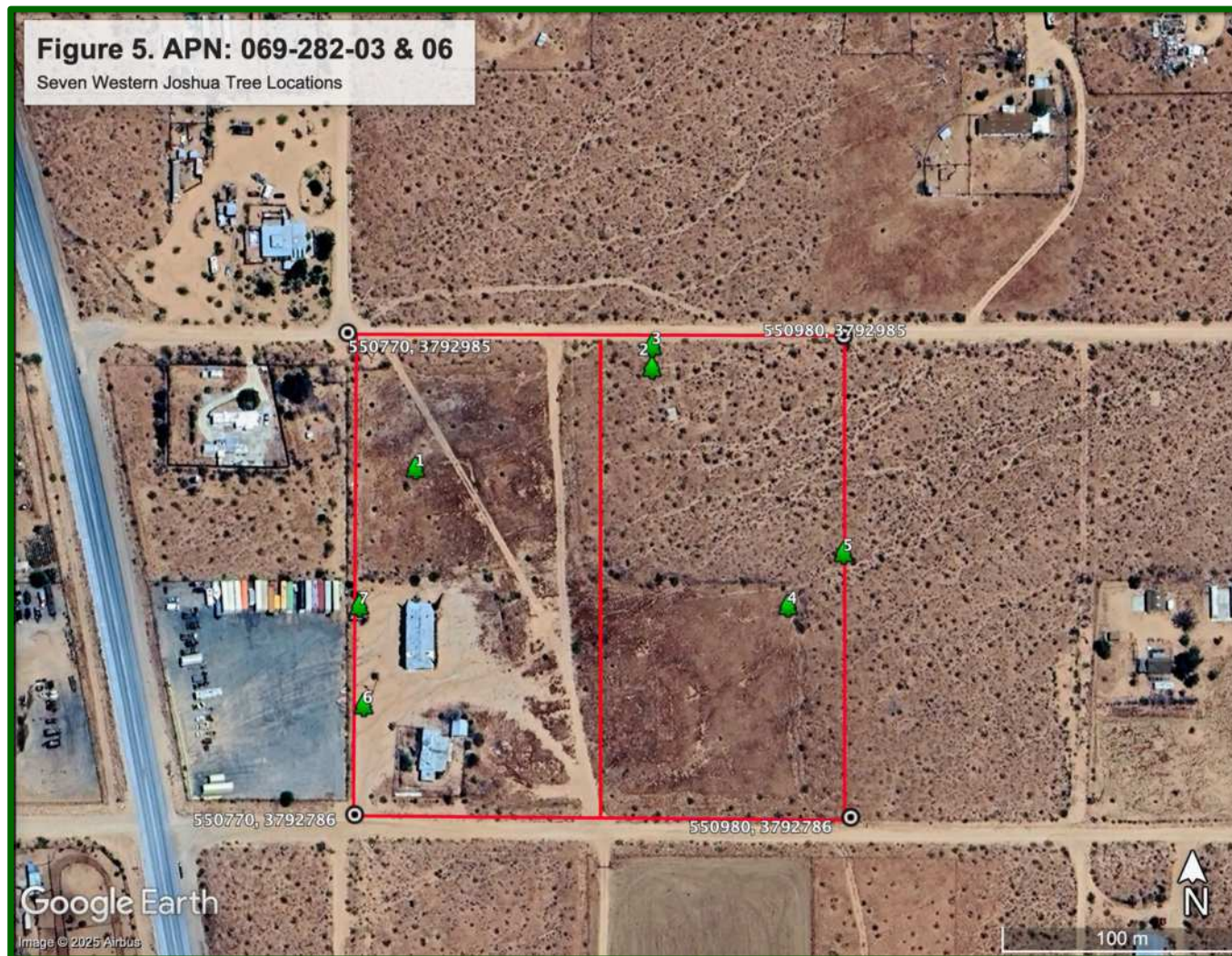






**Figure 4. Locations of Completed Burrowing Owl Transects**





**Figure 5. Seven Western Joshua Tree Location**

## Executive Summary

Loescher Meachem Architects, Inc. contracted Circle Mountain Biological Consultants, Inc. (CMBC) to perform a focused survey for Agassiz's desert tortoise, habitat assessments for burrowing owl, and a general biological resource assessment on a 10-acre site (APNs 069-282-03 & 069-282-06) located in Landers, San Bernardino County, California. A Western Joshua Tree Census was carried out, per the requirements of the California Department of Fish and Wildlife. The legal description for the subject property is U.S. Geological Survey 7.5' Landers Quadrangle, Township 2N, Range 5E, the NW ¼ of the SW ¼ of the NE ¼ (Lots 37 & 38) of Section 10, S.B.B.&M. Per the project's site plan, "The applicant seeks to obtain a conditional use permit for the expansion of an existing motel and addition of a restaurant and pool/spa complex within the Homestead Valley Community Plan." The project spans two contiguous parcels which will be combined in a separate lot merger application.

For a total of four survey hours, between 7:00 a.m. and 9:00 a.m., on September 29, 2025, Sarah Teed and John Myers of CMBC surveyed the site and adjacent areas. This entailed a survey of twenty-three transects onsite, spaced at 10-meter (30-foot) intervals and oriented along a north-south axis throughout the 10-acre parcel. Peripheral transects were surveyed for detection of burrowing owls at 30-meter (100-foot) intervals along five transects to the south and three transects to the east and north. Additional burrowing owl transects could not be completed due to fencing and existing rural residential development. On September 29, 2025, from 9:00 a.m. to 10:00 a.m., Teed and Myers completed the Western Joshua Tree Census within the project site and additional 50-foot buffer area.

Based on Delorme Topo USA® 10.0 software, elevations on the subject property range from approximately 1,045 meters (3,429 feet) at the northwest corner down to 1,038 meters (3,407 feet) at the southeast corner. Terrain is relatively flat. Soils are gravelly loam. No blue-line streams designated by the U.S. Geological Survey occur onsite. The 24 plant species identified during the survey are listed in Appendix A. The two reptiles, four bird, and five mammal species identified during the survey are listed in Appendix B.

Based on the absence of tortoise sign onsite and in adjacent areas, and available information reviewed for this habitat assessment, CMBC concludes that tortoises and burrowing owls are absent from the subject property. As such, no impacts are anticipated and no mitigation measures are recommended. CMBC concludes that habitat loss and degradation onsite and in adjacent areas have significantly diminished the likelihood of occurrence of both tortoises and burrowing owls.

Based on information given herein, CMBC concludes that the following special status species reported from the region are considered to be absent from the subject property: Golden eagle, Swainson's hawk, short-eared owl, Vaux's swift, Little San Bernardino Mountains linanthus, purple-nerve cymopterus.

Cooper's hawk has a moderate likelihood of occurrence, while LeConte's thrasher, Bendire's thrasher, and loggerhead shrike have low likelihoods of occurrence. It is unknown if Crotch's bumble bee occurs, so CDFW may require focused surveys for the species. Protective measures are identified herein, which if implemented should avoid all California Environmental Quality Act-significant impacts.

The Western Joshua Tree Census found seven Western Joshua Trees on the subject property and none within the 50-foot buffer area. Appendix E reports the results and photographs from the census. Seven of the Joshua trees are located in the area that may be directly impacted by the project. CMBC recommends that a certified arborist or western Joshua tree specialist be enlisted to help the proponent avoid all impacts, or alternatively, secure an incidental take permit from the California Department of Fish and Wildlife if impacts cannot be avoided.

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. 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).



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**1.0. Introduction**

1.1. Purpose and Need for Study. Circle Mountain Biological Consultants, Inc. (CMBC) was contacted by Loescher Meacham Architects, Inc. on behalf of Rod Rigole (Proponent) to perform a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessments for burrowing owl (*Athene cunicularia*), and a general biological resource assessment on a 10-acre site located in San Bernardino County, California (see Figures 1 and 2). A Western Joshua Tree (WJT) Census was carried out, per the requirements of the California Department of Fish and Wildlife (CDFW 2023a). Given the location of the site in an unincorporated portion of the county, 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 County of San Bernardino, Public and Support Services Group, Land Use Services Department, Advance Planning Division (County) 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 CDFW, respectively, if the Lead Agency asks them to assess impacts associated with proposed development. Results of CMBC's focused tortoise survey, burrowing owl, WJT census, 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 10-acre site (APNs 069-282-03 & 069-282-06) is located in Landers, San Bernardino County, California. The legal description for the subject property is U.S. Geological Survey (USGS) 7.5' Landers Quadrangle, Township 2N, Range 5E, the NW ¼ of the SW ¼ of the NE ¼ (Lots 37 & 38) of Section 10, S.B.B.&M. Per the project's site plan "The applicant seeks to obtain a conditional use permit for the expansion of an existing motel and addition of a restaurant and pool/spa complex within the Homestead Valley Community Plan." The project spans two contiguous parcels which will be combined in a separate lot merger application.

**2.0. Methods**

2.1. Literature Review. CMBC consulted materials included in our library to determine the nearest tortoise locations and other special status plant and animal species that have been reported from the vicinity of the subject property. Of relevance given their proximity to the subject property are 12 focused tortoise surveys on 11 sites located between approximately 2.1 miles southwest of the parcel (CMBC 2008), 2.8 miles southeast (CMBC 2009), 3.7 miles south (CMBC 2006a, 2006b), and 5.2 miles east-southeast (Tierra Madre Consultants, Inc. 1991). These and other materials used in the completion of this report are listed in Section 5.0, below.

In accordance with *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* [California Department of Fish and Game (CDFG) 2009], CMBC consulted the latest version of the California Natural Diversity Data Base (CDFW 2025a) for rare plant (and animal) records reported from the USGS 7.5' Landers quadrangle, on which the site occurs.

## 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 federally-listed Threatened species and State-listed Endangered species that occurs in the region surrounding the subject property.

For **Agassiz’s desert tortoise**, CMBC followed the presence-absence survey protocol first developed by the USFWS in 1992 and revised 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 it is larger than and encompasses all proposed development. 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 subject property (USFWS 2019), particularly for this site where no tortoise sign was found.

For **western 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; Figure 5 herein). With its narrower transect intervals, the tortoise survey was sufficient to cover the site for burrowing owl. The focus of the survey was 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 **western Joshua tree**, an evaluation of individual WJTs 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)]. Seven WJTs were evaluated on the site and within a 50-foot buffer of the site. Each trunk was photographed, its height measured using an extended measuring stick, and required data collected. Teed recorded locations of the trees using a Garmin global positioning system (GPS) unit, which has a horizontal accuracy of 2 to 3 meters. The tabulated information and photograph for each WJT are included in an attached spreadsheet and report (Appendix E).

**2.2.2. Field Survey Methods.** For a total of four hours, between 7:00 a.m. and 9:00 a.m. on September 29, 2025, Teed and Myers of CMBC surveyed the site and adjacent areas as described herein. This entailed a survey of 23 transects, spaced at 10-meter (30-foot) intervals and oriented along an east-west axis throughout the 10-acre parcel. As depicted in Figure 4, peripheral transects were surveyed to the north, east, and portions of the south (where access was possible) for detection of burrowing owls at 30-meter (100-foot) intervals. Following the general survey, on September 29, 2025, Teed and Myers completed the WJT census from 9:00 a.m. to 10:00 a.m. on the site and within a 50-foot buffer surrounding the subject property where access was possible. Copies of CMBC's data sheet completed in the field and USFWS's (2019) survey data sheet are included in this report (see Appendix C).

As the site was surveyed, Teed kept tallies of observable human disturbances encountered on the 23 transects she surveyed. The results of this method provide *encounter rates* for observable human disturbances. For example, two roads observed on each of 23 transects yields a tally of 46 roads (i.e., two roads encountered 23 times). Habitat quality, adjacent land uses, and this disturbance information are discussed below in Section 3.2 relative to the potential occurrence of Agassiz's desert tortoise and other special status species on and adjacent to the subject property.

Weather conditions recorded at the beginning and ending of the survey included temperatures measured approximately five centimeters (two 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.

<b>Table 1. Weather Summary Data for the Survey</b>			
<b>Date 2025</b>	<b>Begin to End = Total hours*</b>	<b>Weather Conditions</b>	
		<b>Beginning</b>	<b>Ending</b>
9/29	7:00 a.m. to 10:00 a.m. = 6 hrs. (2 Biologist)	69°F, 2 ↑ 8 mph, 0% cloud cover	77°F, 9 ↑ 10 mph, 2% cloud cover

\*Total hours = hours multiplied by two for the two biologists surveying the site = 6 hours, which includes two hours for the WJT census.

All plant and animal species identified during the survey were recorded in field notes. Garmin® hand-held GPS units were used to survey straight-line transects and record Universal Transverse Mercator (UTM) coordinates (North American Datum – NAD 83) for property boundaries, WJT locations, and other pertinent information (Appendix C). A digital camera was used to take representative photographs (Appendix D). ©2025 Google™ Earth was accessed via the internet to provide available aerial photographs of the subject property and surrounding areas (Figures 1 & 2).

### 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 Delorme Topo USA® 10.0 software, elevations on the subject property range from approximately 1,045 meters (3,429 feet) at the northwest corner down to 1,038 meters (3,407 feet) at the southeast corner. Terrain is flat. Soils are sandy loam and friable. No blue-line streams designated by the USGS occur onsite.

3.1.1. *Common Flora*. The 24 plant species identified during the survey are listed in Appendix A. The habitat is Creosote Bush-White Bursage Desert Scrub with dominant perennials found on the parcel including burrobush (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), and white rhatany (*Krameria grayi*) with the following co-occurring species: silver cholla (*Cylindropuntia echinocarpa*), branched pencil cholla (*Cylindropuntia ramosissima*), desert senna (*Senna armata*), beavertail cactus (*Opuntia basilaris*), Joshua tree (*Yucca brevifolia*), Mexican palo verde tree (*Parkinsonia aculeata*), and Mojave yucca (*Yucca schidigera*). Additional plant species observed within the subject property include cheesebrush (*Ambrosia salsola*), coyote melon (*Cucurbita palmata*), and California ephedra (*Ephedra californica*).

Few annual plants were detectable in September since wildflowers and other native annuals are rarely detectable beyond the spring months. Recent rains had provided some blooms, but many common annual species could not be detected. Observed species included cinchweed (*Pectis papposa*), red-stemmed filaree (*Erodium cicutarium*), and rattlesnake weed (*Euphorbia albomarginata*). Mediterranean split-grass (*Schismus* sp.), Russian thistle (*Salsola tragus*), and Saharan mustard (*Brassica tournefortii*), which are exotic species, were also observed. Several cactus species are present on the site, including silver cholla, beavertail cactus, hedgehog cactus (*Echinocereus engelmannii*), and pencil cholla.

3.1.2. *Common Fauna*. The two reptile, four bird, and five mammal species identified during the survey are listed in Appendix B. The two reptile species detected included common side-blotched lizard (*Uta stansburiana*) and western whiptail (*Asidoscelis tigris*). Other locally common reptile species that may occur include 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* ssp.).

Birds present on the site and surrounding areas at the time of the survey included common raven (*Corvus corax*), Say's phoebe (*Sayornis saya*), mourning dove (*Zenaidura macroura*), and black-throated sparrow (*Amphispiza bilineata*). These are relatively common birds for rural areas of the western Mojave Desert. All detected mammals are typical desert species including Audubon cottontail (*Sylvilagus audubonii*), antelope ground squirrel (*Ammospermophilus leucurus*), Botta pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). One domestic dog skull was observed during the survey, with several domestic dog digs recorded within the site.

### 3.2. Uncommon Biological Resources.

3.2.1. *Agassiz's Desert Tortoise*. No tortoise sign was found either onsite 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 in urbanizing areas within the region (see Figure 3), CMBC concludes that Agassiz's desert tortoise is absent from the subject property. One quarter of the survey area, found to the northeast is marginally suitable habitat, less impacted, with intact vegetation present. Given the isolation of the site from adjacent habitats capable of supporting wild tortoise (see Figure 2), there is very little likelihood that wild tortoises could enter the site from adjacent areas, either to pass through the site or establish residency. State Route 247 is located less than 0.10 mile to the west, and the site is bordered by roads on multiple sides.

Encounter rates for observable human disturbances included three dirt roads and one dump site. Wind-blown trash was present throughout the site. A home and associated outbuildings are present at the southwest corner of the parcel (see Figure 2). The site is considered to be significantly disturbed (see photographs in Appendix D). Observed disturbances included scattered trash, a concrete pad located in the northeast portion of the subject property, and influences from the bordering two roads: New Dixie Mine Road and Sunnyslope Drive. Off road vehicle impacts have established a track through the property.

As depicted in Figure 3, CMBC personnel have surveyed 10 sites within approximately 8.9 miles of the subject property. No tortoise sign was found on the three sites surveyed between 2.7 and 5.4 miles south and southeast of the site (CMBC 2005b, 2007a, 2007b), which like the subject property, occurred in rural areas with residential development. Tortoise signs found on a square mile located 3.7 miles to the south (CMBC 2006a, 2006b) included 7 tortoises, 29 burrows, 109 fresh scat, 42 older scat, and 2 sets of tracks. Unlike the subject property that occurs in a residential neighborhood, there was only scattered development to the south in Landers and west in Flamenco Heights but little development immediately adjacent and no structures on the square mile where the tortoise sign was relatively common for the region. Approximately the eastern half of that site occurred in Pipes Wash.

Other recorded observations of tortoise sign have included 55 burrows found during focused surveys of the 106-mile proposed Joshua Basin Pipeline (TMC 1991). In a subsequent survey of 50.25 miles of that pipeline, biologists found 72 scats, 37 burrows, 2 carcasses, 6 tortoises, and 1 set of tracks. When 56 miles of that pipeline were installed in 1996, biologists found 196 burrows (32 excavated) and 41 tortoises between April 23 and November 20, 1996. Surveys along nine miles of a 11.5-mile pipeline surveyed 3.9 miles to the southeast found 3 burrows and 18 scats. (TMC 1993). These observations support the conclusion that tortoises still occur in less-developed areas within the region but are absent from urbanizing areas such as surround the subject property.

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.* USFWS (2008), CDFW [CDFW 2025a for California Natural Diversity Data Base (CNDDB); 2025b for Special Plant Species list; 2025c for Special Animal Species list; and California Native Plant Society (CNPS 2025)] maintain lists of animals and/or plants considered rare, Threatened, or Endangered, which are herein collectively referred to as “special status species.” No State or federal regulatory agency-designated special status species were identified during the current survey.

The two main sources for the following information are from previous surveys performed by CMBC within about eight miles of the site as depicted in Figure 3 and species reported from the CNDDB on the USGS 7.5’ Landers quadrangle (CDFW 2025a).

Table 2. Special Status Species’ Likelihood of Occurrence			
Common Name	Scientific Name	# Occurrences	Likelihood of Occurrence
Cooper's hawk	<i>Accipiter cooperii</i>	1 CMBC	No nesting habitat, foraging habitat present = <b>Moderate</b>
Golden eagle	<i>Aquila chrysaetos</i>	1 CMBC	Neither nesting nor foraging habitat present = <b>Absent</b>
Burrowing owl	<i>Athene cunicularia</i>	5 CMBC	One suitable burrow, ¼ of site is suitable foraging habitat. No sign recorded = <b>Absent</b>
Short-eared owl	<i>Asio flammeus</i>	1 CMBC	No nesting, low foraging habitat present = <b>Absent</b>
Swainsons Hawk	<i>Buteo swainsoni</i>	1 CMBC	Neither nesting nor foraging habitat present = <b>Absent</b>
Loggerhead shrike	<i>Lanius ludovicianus</i>	5 CMBC	Marginal foraging and nesting habitat present but highly degraded = <b>Low</b>
LeConte’s Thrasher	<i>Toxostoma lecontei</i>	8 CMBC 2 CNDDB	Marginal foraging and nesting habitat present but highly degraded = <b>Low</b>
Prairie Falcon	<i>Falco mexicanus</i>	1 CMBC	No nesting habitat, some foraging habitat present = <b>Low</b>
Little San Bernardino Mtns. linanthus	<i>Linanthus maculatus ssp. maculatus</i>	6 CNDDB	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 = <b>Absent</b>
Purple-nerve cymopterus	<i>Cymopterus multinervatus</i>	1 CNDDB	Mojavean desert scrub, pinyon and juniper woodland. Sandy or gravelly places. 765-2195 m. Joshua tree woodland = <b>Absent</b>
Desert tortoise	<i>Gopherus agassizii</i>	8 CNDDB 6 CMBC	Desert scrub, desert wash, and Joshua tree habitats. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred = <b>Absent</b>
Bendire’s thrasher	<i>Toxostoma bendirei</i>	2 CNDDB	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. Marginal foraging and nesting habitat present but highly degraded = <b>Low</b>
Vaux’s swift	<i>Chaetura vauxi</i>	1 CMBC	May pass over the site during migration but would not nest or forage there = <b>Absent</b>

Most of the species listed in Table 2 as “Absent” would not occur for lack of suitable habitats (golden eagle, Little San Bernardino Mountains linanthus, purple-nerve cymopterus), would have been detected if present (desert tortoise, burrowing owl), or are migrants that may fly over the site but would not stop there (Swainson’s hawk, short-eared owl, Vaux’s swift). The next few subsections provide additional information to qualify why CMBC considers species to have moderate (Cooper’s hawk) or low (prairie falcon, LeConte’s thrasher, loggerhead shrike, Bendire’s thrasher) likelihood of occurrence. We also include Crotch’s bumble bee for the reasons given.

**Cooper’s hawk** is a year-round resident, raptor species that is designated as a Watch List species by CDFW (2025c). Two were observed on the square mile site located 7.9 miles south (CMBC 2006b in Figure 3). Cooper’s hawks are relatively tolerant or even benefitted by human development as they may nest in landscaped trees, so there are foraging habitats throughout the property and an abundance of small and medium-sized birds on which they may prey. For these reasons, their likelihood of occurrence is given as “moderate.”

**Prairie falcon** is designated as a Watch List species by CDFW (2025c) and a Bird of Conservation Concern by the USFWS (2008). Although not observed during the survey, several prairie falcons were observed along an unspecified location on the 11-mile pipeline surveyed by CMBC (2008). There are no suitable nesting substrates (cliff faces and other inaccessible areas) onsite and foraging habitat is negligible due to the location of the subject property in a residential neighborhood.

**LeConte’s thrasher** is designated as a California Species of Special Concern by CDFW (2025c) and as a Bird of Conservation Concern by the USFWS (2008). Although none was observed during the survey, CMBC (2006b) observed them in 9 of the 12 surveys conducted within approximately eight miles of the subject property. There are marginally suitable nesting and foraging habitats on the northeastern quarter of the site, but given the degradation of the site, their likelihood of occurrence is given as “low.” LeConte’s thrashers may nest in several cactus species, particularly silver cholla, and in larger shrubs, and could forage on the subject property.

**Loggerhead shrike** is designated as a California Species of Special Concern by CDFW (2025c) and a Bird of Conservation Concern by the USFWS (2008). Shrikes were observed on the square-mile site to the south (CMBC 2006a, 2006b), 2.1 miles to the north (CMBC 2008), and 5.4 miles to the southeast (CMBC 2005a). Having been observed 47 times in the Morongo Basin by CMBC personnel between 1989 and 2025, this has been the most frequently encountered rare bird species in the region. There are suitable nesting substrates in WJTs, Mojave yuccas, and landscaped trees and foraging habitats for loggerhead shrikes occur throughout the subject property.

**Bendire’s thrasher** is designated as a California Species of Special Concern by CDFW (2025c), designated as a Bird of Conservation Concern by the USFWS (2008), and is considered Sensitive by the BLM (CDFW 2025c). The spring-summer resident and breeder in California deserts arrives in March, nests, and leaves the region by July (BLM 2005). They nest in cholla, yucca, palo verde, thorny shrub, and/or small trees, usually 0.3 to 7 meters aboveground. They have been two reports to the CNDDDB (CDFW 2025a). Given the degradation of the site, their likelihood of occurrence is given as “low.”

**Western Joshua tree** is a Candidate for listing as a California Threatened Species and is protected under the Western Joshua Tree Conservation Act. As mapped in Figure 5, seven WJTs were found on the subject property and none within 50 feet of the property line. Information and photographs for each of the trees are included in Appendix E.

**Crotch's 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. In fact, the species is not reported to the CNDDB (CDFW 2025a). However, CMBC coincidentally received a letter written to San Bernardino County Planning Department dated September 25, 2025 for the proposed Pioneertown Motel Project in which CDFW<sup>1</sup> made the following statements:

“The Project is within the range of Crotch's bumble bee, a CESA candidate species. Additionally, the Project site contains buckwheat (*Eriogonum fasciculatum*), Notch-leaf phacelia (*Phacelia crenulata*), and other flowering plants that provide foraging habitat for Crotch's bumble bee. Crotch's bumble bee is considered imperiled and is extremely rare. However, the MND [mitigated negative declaration] did not consider impacts to this species. For these reasons, CDFW recommends BIO-5 below for adoption in the final MD to avoid and minimize impacts to Crotch's bumble bee.”

“BIO-5: Crotch's Bumble Bee (New)”

“Crotch's bumble bee focused surveys shall be conducted within the Project site and within 100-feet of the Project site prior to the start of Project activities. Surveys shall be conducted using survey guidance in the 2023 Survey Considerations for Candidate Bumble Bee Species [CDFW 2023b]. If Crotch's bumble bee is detected through surveys, Permittee shall fully avoid impacts to Crotch's bumble bee or should obtain a CESA ITP [incidental take permit].”

Although **western burrowing owl** is considered to be absent from the subject property and adjacent areas that were surveyed, as a Candidate Species for Listing it is prudent to provide more information. The subject property is comprised of somewhat suitable habitat for burrowing owl with friable soils suitable for burrowing. Forage for burrowing owls is present within the subject property consisting of insects, birds, and reptiles. The subject property has an intermittent to open shrub cover with mostly low-growing vegetation and flat topography suitable for high visibility for predation avoidance. One burrow of appropriate size for burrowing owl usage (Exhibit 5, Appendix D) was observed within the subject property during the survey, however no burrowing owl sign was observed. For these reasons, CMBC considers burrowing owl to be “absent.”

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<sup>1</sup> <https://www.dropbox.com/t/5hbuhSoFwUBG2dZB>



### 3.3. Other Protected Biological Resources.

3.3.1. *Stream Courses.* Stream courses provide relatively important resources to animals and plants. In dry years, and particularly during prolonged drought, annual plants may only germinate in the vicinity of washes where the water table is relatively near the surface. Perennial shrubs adjacent to washes are often the only plants that produce flowers and fruit, which in turn are important to insects and the avian predators that feed on them. Shrubs also tend to be somewhat taller and denser alongside washes, which provides cover for medium and larger sized animals that may use them as travel corridors. Biodiversity is generally enhanced by washes, and there are often both annual and perennial plants that are either restricted to or mostly associated with wash margins. There are both anecdotal accounts and published literature on washes being important to tortoises, which use them as travel corridors and access to nearby annual forage. No stream courses were observed on the subject property.

3.3.2. *Protected Plant Species.* At the County level, the San Bernardino County Development Code was revised and adopted on 12 April 2007. Chapter 88.01 Plant Protection and Management, Section 88.01.020 states, “The provisions of this Chapter apply to the removal and relocation of regulated trees or plants and to any encroachment (for example, grading) within the protected zone of a regulated tree or plant on all private land within the unincorporated areas of the County and on public lands owned by the County, unless otherwise specified...”

Section 88.01.060 Desert Native Plant Protection states, “This Section 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...”

Section 88.01.060(c) Regulated Desert Native Plants states, “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 in compliance within Section 88.01.050 (Tree or Plant Removal Permits) (those that occur onsite are highlighted in red):

- (1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
  - (A) *Dalea spinosa* (smoke tree).
  - (B) All species of the genus *Prosopis* (mesquites).
- (2) All species of the family *Agavaceae* (century plants, nolinias, yuccas).
- (3) Creosote Rings, 10 feet or greater in diameter.
- (4) All Joshua trees.
- (5) Any part 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* (palo verdes).”

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, nolinās, 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.

Western Joshua tree, Mojave yucca, silver cholla, beavertail cactus, pencil cholla, and hedgehog cactus are the six plant species included in one or both of above lists that were observed on the subject property.

#### **4.0. Conclusions and Recommendations**

4.1. Impacts to Agassiz’s Desert Tortoise and Proposed Mitigation. Based on the absence of tortoise sign onsite 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 September 29, 2026.

In the same letter given in the footer on page 8 above for the Pioneertown Motel Project, CDFW stated, “CDFW appreciates that the MND recognizes that since surveys were conducted on February 23, 2025 and results are deemed valid for a period of 12 months from date of survey, if construction commence [sic] after February 23, 2025, an additional survey will be conducted to ensure desert tortoise are [sic] not present.” Given this statement and assuming it reflects current management by all CDFW regional offices, if the site is not developed by September 29, 2026, CDFW will likely require another survey.

Regardless of survey results and conclusions given herein, tortoises are protected by applicable State and federal laws, including the CESA and Federal Endangered Species Act (FESA), respectively. As such, if a tortoise is found onsite at the time of construction, all activities likely to affect that animal(s) should cease and the County contacted to determine appropriate steps. Given the location of the proposed project in a residential neighborhood, it is very likely that a tortoise found onsite would be an escaped pet. However, it would take a very experienced field biologist to differentiate between a wild versus a pet tortoise, so all tortoises should be treated as if they are wild until which time a qualified biologist makes the determination.

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 FESA].

#### 4.2. Impacts to Other Biological Resources and Proposed Mitigation.

4.2.1 *Other Special Status Species.* Based on the information provided herein and CMBC's experience, we conclude that none of the following species are likely to be affected by the proposed project: golden eagle, burrowing owl, short-eared owl, Swainson's hawk, Vaux's swift, Little San Bernardino Mountains linanthus, and purple-nerve cymopterus.

CMBC cannot conclude that Crotch's bumble bee is absent, and as given herein, CDFW may require that a focused survey to be performed before ground disturbance can occur.

Site development may result in a loss of 10 acres of marginal foraging habitat for Cooper's hawk, which has a moderate likelihood of occurrence, and LeConte's thrasher, Bendire's thrasher, and loggerhead shrike, each with a low likelihood of occurrence. If they occur, the more significant impact would be to nesting birds than to the loss of foraging habitat. Conscientiously implementing protective measures given in Section 4.2.2.c herein will effectively avoid impacts to nesting birds.

The WJT census found seven WJTs on the subject property and none within 50 feet, outside of the property line. Of these, two trees were dead and down and five onsite trees were alive. All seven of the WJTs are located in the area that may be directly or indirectly impacted by the project. CMBC recommends that a certified arborist or western Joshua tree specialist be enlisted to help the proponent avoid all impacts, or alternatively, secure an incidental take permit from the CDFW if impacts cannot be avoided.

#### 4.2.2. *Other Protected Biological Resources.*

4.2.2.a. Stream Courses. Since no streams occur, no protective measures are recommended.



4.2.2.b. Protected Plants. Although herein CMBC has provided baseline data to inform the County of the presence of protected plants on the subject property (particularly for WJTs), it is beyond the scope of these studies to provide a proposed program to minimize and mitigate impacts to protected native desert plants. The County may need to require 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. WJT, Mojave yucca, silver cholla, beavertail cactus, hedgehog cactus, and pencil cholla, are the six plant species that were observed on the subject property that may be subject to pertinent development codes.

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 (these dates may fluctuate slightly by one to 2 weeks, due to seasonal variations) 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). Whereas these dates represent typical times for nesting birds, ALL active bird nests (e.g., those with eggs and nestlings) are protected regardless of the usual nesting season and surveys should be performed as follows.

Surveys should be conducted throughout the year and be conducted 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 are observed, project activities may begin. If an active bird nest is located, it would be appropriate to seek guidance from CDFW, and the plant in which it occurs should be left in place until the birds fledge. No construction is allowed near active bird nests of Threatened or Endangered species.

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## Appendix A. Plant Species Detected

The following plant species were identified onsite during the focused floral inventory described in this report. Protected plant species are **highlighted in red** and signified by “(PPS)” following the common names.

### GNETAE

#### **Ephedraceae**

*Ephedra californica*

### ANGIOSPERMAE: DICOTYLEDONES

#### **Amaranthaceae**

*Salsola tragus*

#### **Asteraceae**

*Ambrosia dumosa*

*Ambrosia salsola*

*Pectis papposa*

*Xylorhiza tortifolia*

#### **Brassicaceae**

\**Brassica tournefortii*

\**Sisymbrium irio*

#### **Cactaceae**

*Cylindropuntia echinocarpa*

*Opuntia basilaris*

*Echinocereus engelmannii*

#### **Cucurbitaceae**

*Cucurbita palmata*

#### **Euphorbiaceae**

*Euphorbia albomarginata*

#### **Fabaceae**

*Parkinsonia aculeata*

*Senna covesii*

#### **Krameriaceae**

*Krameria (grayi) bicolor*

#### **Geraneaceae**

\**Erodium cicutarium*

### GNETAE

#### **Joint-fir family**

Desert tea

### DICOT FLOWERING PLANTS

#### **Amaranth family**

Russian thistle

#### **Sunflower family**

Burrobush

Cheesebush

Chinch weed

Desert aster

#### **Mustard family**

Saharan mustard

London rocket

#### **Cactus family**

Silver cholla (PPS)

Beavertail cactus (PPS)

Hedgehog cactus (PPS)

#### **Gourd family**

Coyote gourd

#### **Spurge family**

Rattlesnake weed

#### **Pea family**

Mexican palo verde

Senna

#### **Krameria family**

White rhatany

#### **Geranium family**

Red-stemmed filaree

**Onagraceae***Oenothera primiveris***Evening-primrose family**

Yellow evening-primrose

**Poaceae**\**Schismus* sp.**Grass family**

Split-grass

**Polygonaceae***Eriogonum deflexum**Eriogonum fasciculatum***Buckwheat family**

Desert skeleton weed

California buckwheat

**Zygophyllaceae***Larrea tridentata***Caltrop family**

Creosote bush

## ANGIOSPERMAE: MONOCOTYLEDONES

## MONOCOT FLOWERING PLANTS

**Liliaceae***Yucca brevifolia**Yucca schidigera***Lily family**

Joshua tree (PPS)

Mojave yucca (PPS)

\* - 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.

### REPTILIA

#### **Iguanidae**

*Uta stansburiana*

#### **Teiidae**

*Asidoscelis tigris*

### AVES

#### **Corvidae**

*Corvus corax*

#### **Columbidae**

*Zenaida macroura*

#### **Tyrannidae**

*Sayornis saya*

#### **Emberizidae**

*Amphispiza bilineata*

### MAMMALIA

#### **Sciuridae**

*Ammospermophilus leucurus*

#### **Leporidae**

*Sylvilagus audubonii*

#### **Geomyidae**

*Thomomys bottae*

#### **Canidae**

*Canis latrans*

#### **Felidae**

*Lynx rufus*

### REPTILES

#### **Iguanids**

Common side-blotched lizard

#### **Whiptails**

Whiptail lizard

### BIRDS

#### **Crows and jays**

Common raven

#### **Pigeons and doves**

Mourning dove

#### **Tyrant flycatchers**

Say's phoebe

#### **Sparrows, warblers, tanagers**

Black-throated sparrow

### MAMMALS

#### **Squirrels**

Antelope ground squirrel

#### **Hares and rabbits**

Audubon cottontail

#### **Pocket gophers**

Botta pocket gopher

#### **Foxes, wolves and coyotes**

Coyote

#### **Cats**

Bobcat

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 September 27, 2025

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 Sarah Teed on September 29, 2025, follow.

Version: October 8, 2019

Date of survey: 29.9.2025 Survey biologist(s): SARAH TEED cmbcst@gmail.com  
(day, month, year) (name, email, and phone number)

Site description: Lonely Dove, 10+ acres, Landers Quad, NW of Joshua Tree CA  
(project name and size; general location)

County: San Bernardino Quad: Landers Location: 11S 550976, 3792986  
(UTM coordinates, lat-long, and/or TRS, map datum)

Circle one: 100% coverage or sampling Area size to be surveyed: 10 acres Transect #: 23 Transect length: \_\_\_\_\_

GPS Start-point: 11S 550773, 3792985, 1045m Start time: 7:00 am/pm  
(easting, northing, elevation in meters)

GPS End-point: 11S 550977, 3792786, 1038m End time: 10:00 am/pm  
(easting, northing, elevation in meters)

Start Temp: 20.5°C 69°F End Temp: 25°C 77°F

Live Tortoises						
Detection number	GPS location		Time	Tortoise location (in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)	Approx MCL ≥180 mm? (Yes, No or Unknown)	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, scats, carcasses, etc)				
Detection number	GPS location		Type of sign (burrows, scats, carcass, etc)	Description and comments
	Easting	Northing		
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*)

Exhibit 1. USFW data sheet

### Exhibit 2. Survey data sheet

## Appendix D. Photographic Exhibits

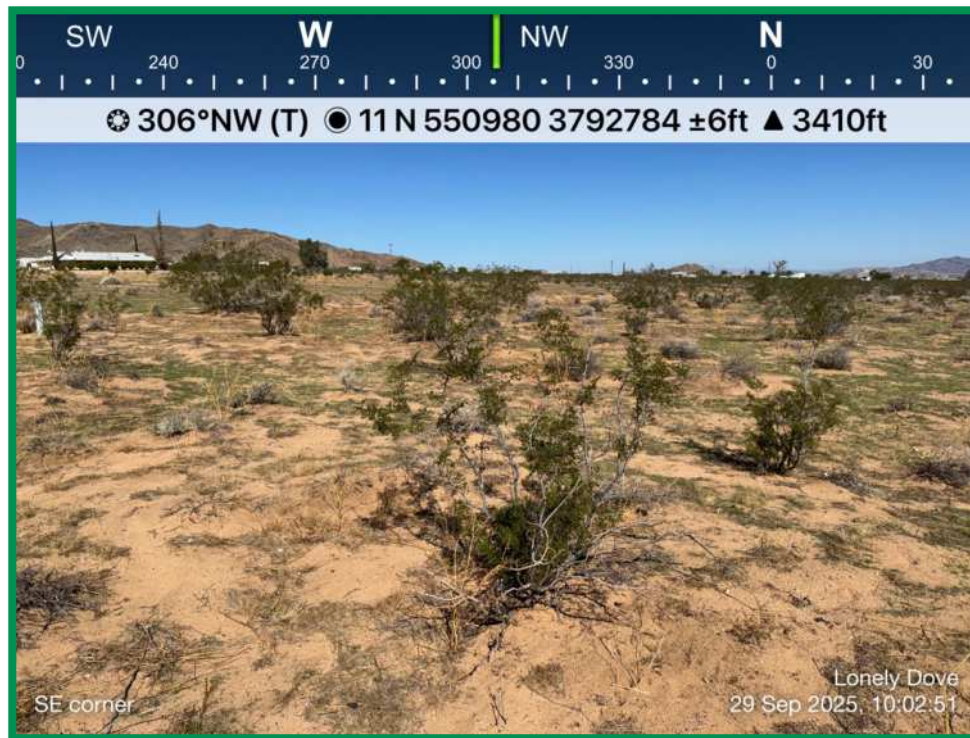


**Exhibit 1.** View from the northwest corner of the parcel, facing southeast.





**Exhibit 2.** View from the southwest corner of the parcel, facing northeast.



**Exhibit 3.** View from the southeast corner of the parcel, facing northwest.



**Exhibit 4.** View from the northeast corner of the parcel, facing southwest.





**Exhibit 5.** Burrow of appropriate size for burrowing owl use. No burrowing owl sign was found here or elsewhere.



**Exhibit 6.** Established buildings located on southeast corner of subject property.



**APPENDIX E**  
**Results of a Western Joshua Tree Census**  
**for a 10-acre site (APNs 069-282-03 & 069-282-06) in the Community of Landers,**  
**San Bernardino County, California**

In October 2020, the California Fish and Game Commission accepted as complete a petition to list western Joshua tree (WJT) as a California Endangered Species. To date, no decision has been made on the listing of the species. However, the Western Joshua Tree Conservation Act (WJTCA) was enacted in July 2023. “The WJTCA prohibits the importation, export, take, possession, purchase, or sale of any western Joshua tree in California unless authorized by CDFW. The act authorizes CDFW to issue permits for the incidental take of one or more western Joshua trees if the permittee meets certain conditions. Permittees may pay specified fees in lieu of conducting mitigation activities. The act also authorizes CDFW to issue permits for the removal of dead western Joshua trees and the trimming of live WJTs under certain circumstances” (CDFW 2023a).

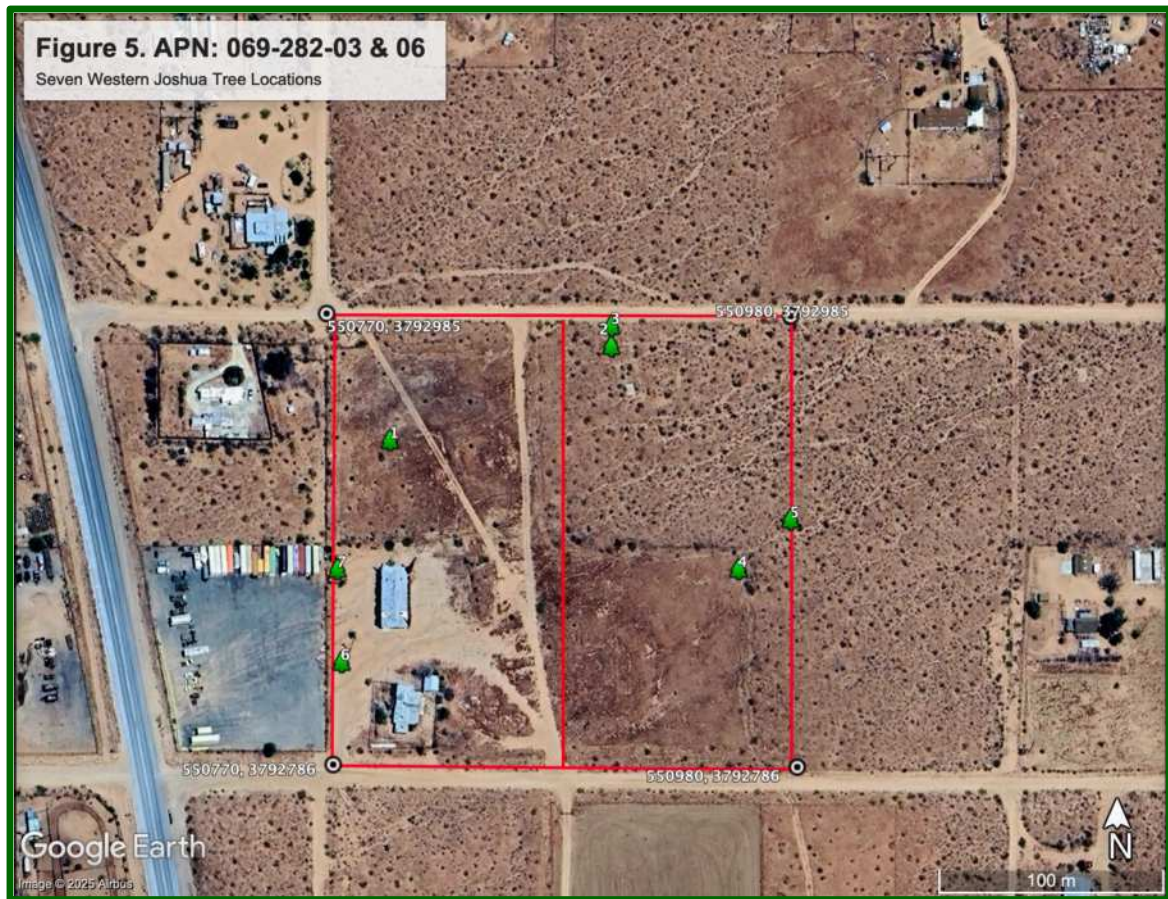
“In March 2022, CDFW prepared a status review report for western Joshua tree evaluating whether listing the species as Endangered or Threatened under the California Endangered Species Act would be warranted. The WJTCA requires CDFW to prepare an updated status review report by January 1, 2033, unless the Fish and Game Commission directs CDFW to complete the update sooner, and directs the Fish and Game Commission to consider the effectiveness of the conservation measures of the WJTCA, the updated status review report, and other factors before deciding whether the current petition to list the western Joshua tree under the California Endangered Species Act is warranted” (CDFW 2023a).

On September 29, 2025, Sarah Teed and John Myers of CMBC carried out a WJT census on the 10-acre site and in a 50-foot buffer immediately bordering the subject property. Seven WJTs were documented on the subject property, and none were recorded from within 50 feet of the site. Table E-1, below, shows the distribution of size classes and conditions for WJTs on the site and in the buffer area.





<b>Table E-1. Distribution of Joshua Trees by Size and Condition</b>						
	Onsite	Off-Site	Dead Standing	Dead & Down	Living	Total
Class A	1	0	0	0	1	1
Class B	4	0	0	2	2	4
Class C	2	0	0	0	2	2
<b>All</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>7</b>

Table E-2 below provides the data and photographs collected for each of the WJTs counted in the census. The seven trees within the proposed subject property could be directly or indirectly affected by the project. The specific subject property and access routes were not delineated during the biological survey and WJT impacts are an estimate.

As given above in Section 4.2.2.b, it is appropriate that a certified arborist or experienced WJT specialist use the information given herein to develop a proposed program to salvage, transplant, and otherwise minimize the taking to WJTs, which should not occur in the absence of a project-specific ITP.



**Table E-2. Photographs and Coordinates of Joshua Trees**

				
JT1-Live	JT2-Live	JT3-Dead	JT4-Dead	JT5-Live
				
JT6-Live	JT7-Live			

**Table E-2. Coordinates of Joshua Trees**

Tree ID	Tree Easting UTM NAD 83	Tree Northing UTM NAD 83	Size Class	Actual Height of Tree in Feet	Live or Dead	Mature Y/N
1	550798	3792923	B	12'	Live	Y
2	550896	3792965	B	3' 8"	Live	N
3	550896	3792974	B	Remaining-3' 9"	Dead	Y
4	550953	3792867	B	Remaining-3'	Dead	Y
5	550976	3792889	B	11'	Live	Y
6	550777	3792825	C	18'	Live	Y
7	550775	3792866	C	20'	Live	Y