Focused Survey for Agassiz's Desert Tortoise,
Habitat Evaluation for Burrowing Owl, Focused Survey for Joshua Trees,
General Biological Resource Assessment, and
Jurisdictional Waters Analysis for a
10-acre± Site (TT 17328) in the Town of Yucca Valley
San Bernardino County, California

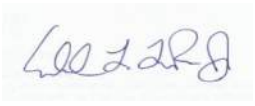
(U.S. Geological Survey 7.5' Yucca Valley South quadrangle, Township 1 South, Range 6 East, a portion of the Northwest ¼ of Section 6, S.B.B.&M.)

Job#: 24-026

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:
Empire Development and Construction
1273 Belridge St.
Oceano, California 93445
PH: (702) 328-5002
Email: fredbrilmanre@gmail.com
Contact: Fred Brilman

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.
Authors and Field Investigators: Edward L. LaRue, Jr. and Susan Seville

July 2024
(Revised February 2026)

Figure 1. TT 17328: Vicinity Map

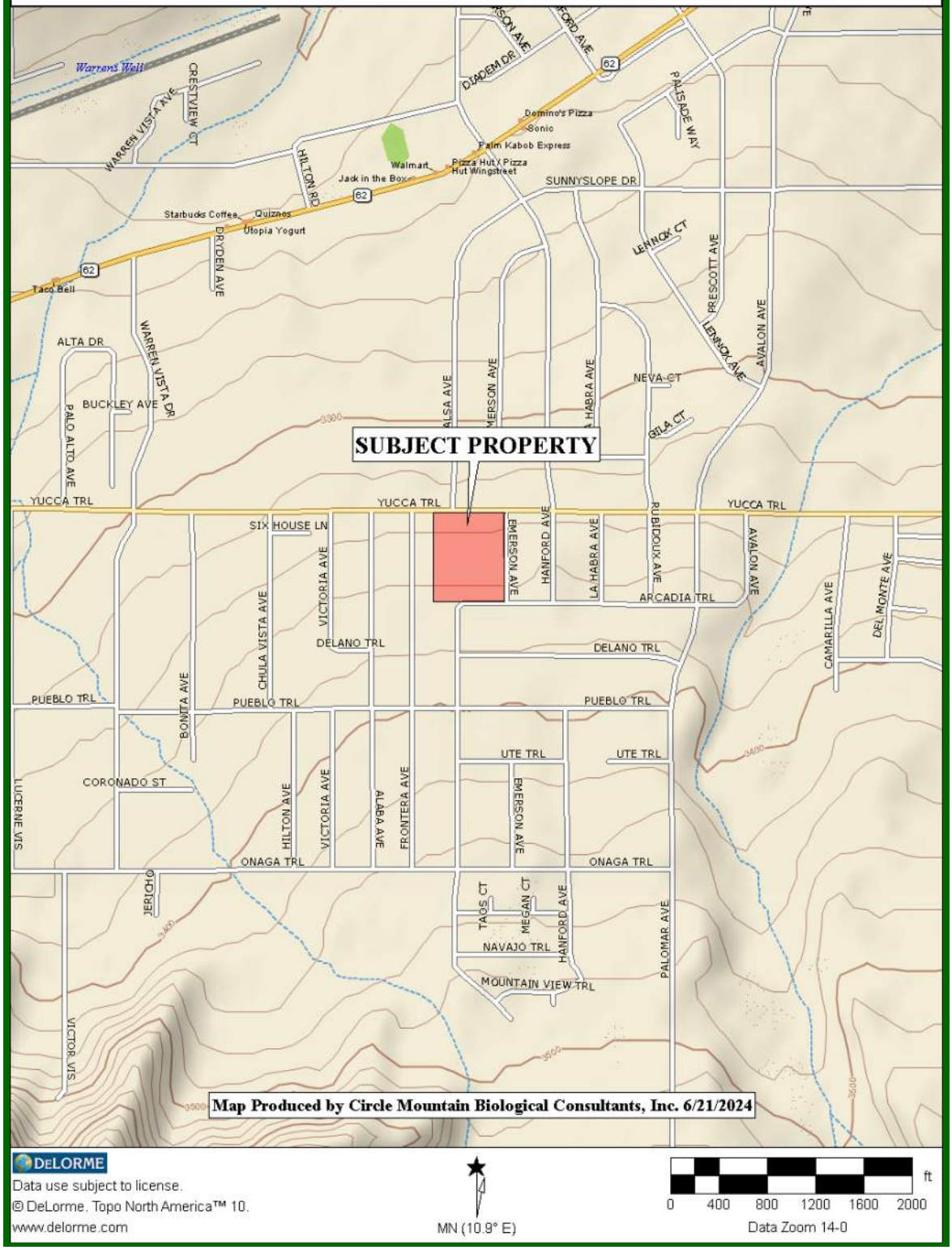


Figure 2. TT 17328: Site Map

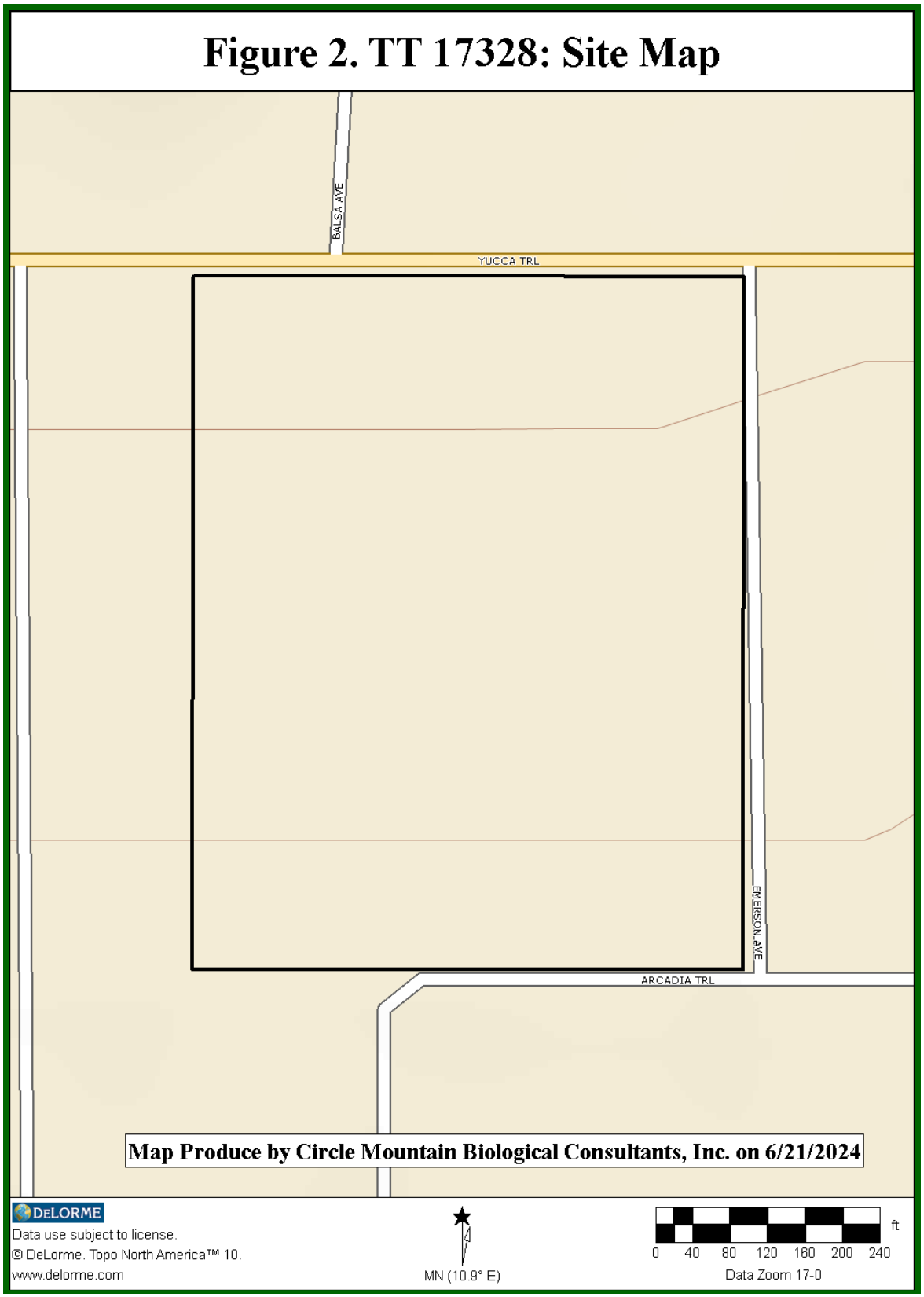


Figure 3. Results of 13 Tortoise Surveys in the Area between 2002 and 2024

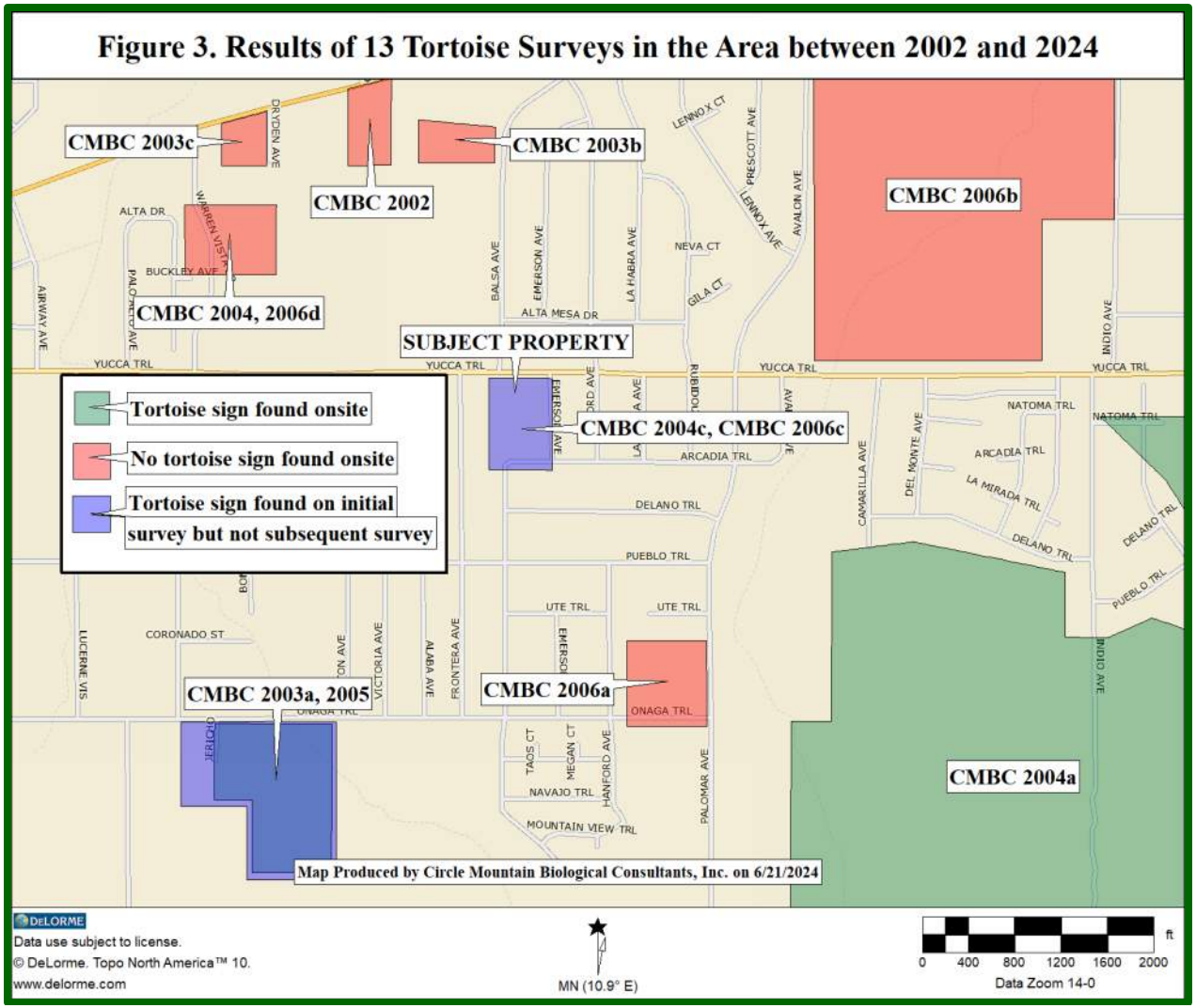
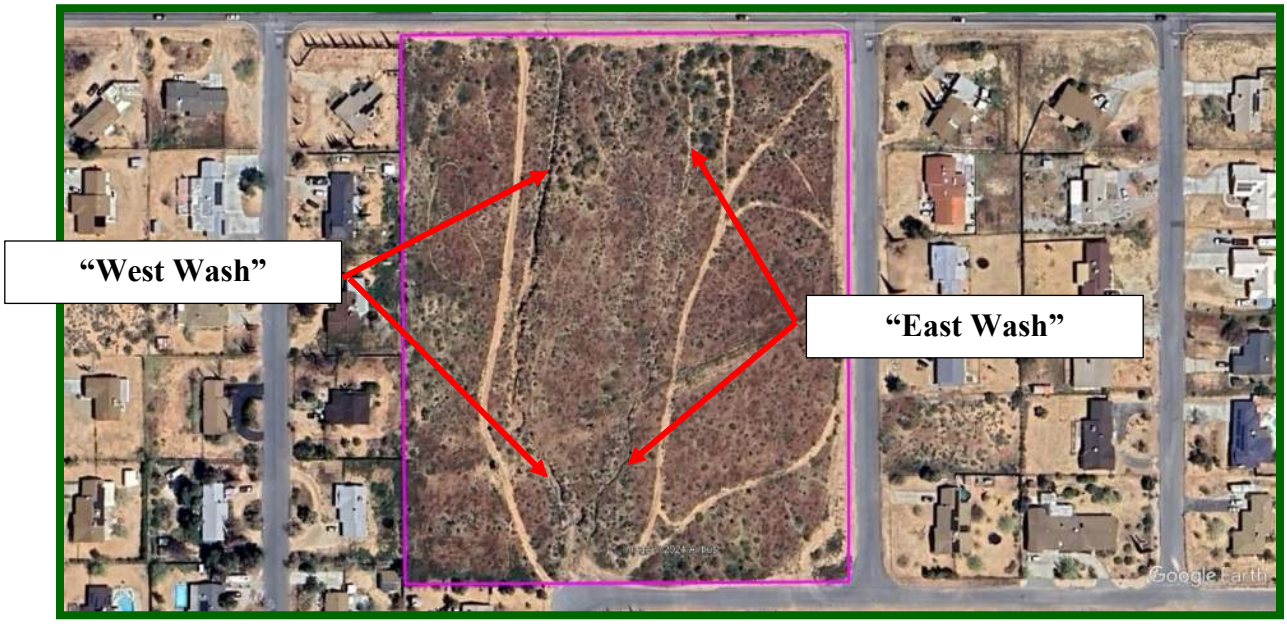


Figure 4. TT 17328:
Aerial Photograph (©2024Google Earth)



Enlarged aerial view from approximately 1,375 feet altitude (Image date: 4/13/2023)

Regional aerial view from approximately 11,000 feet altitude.

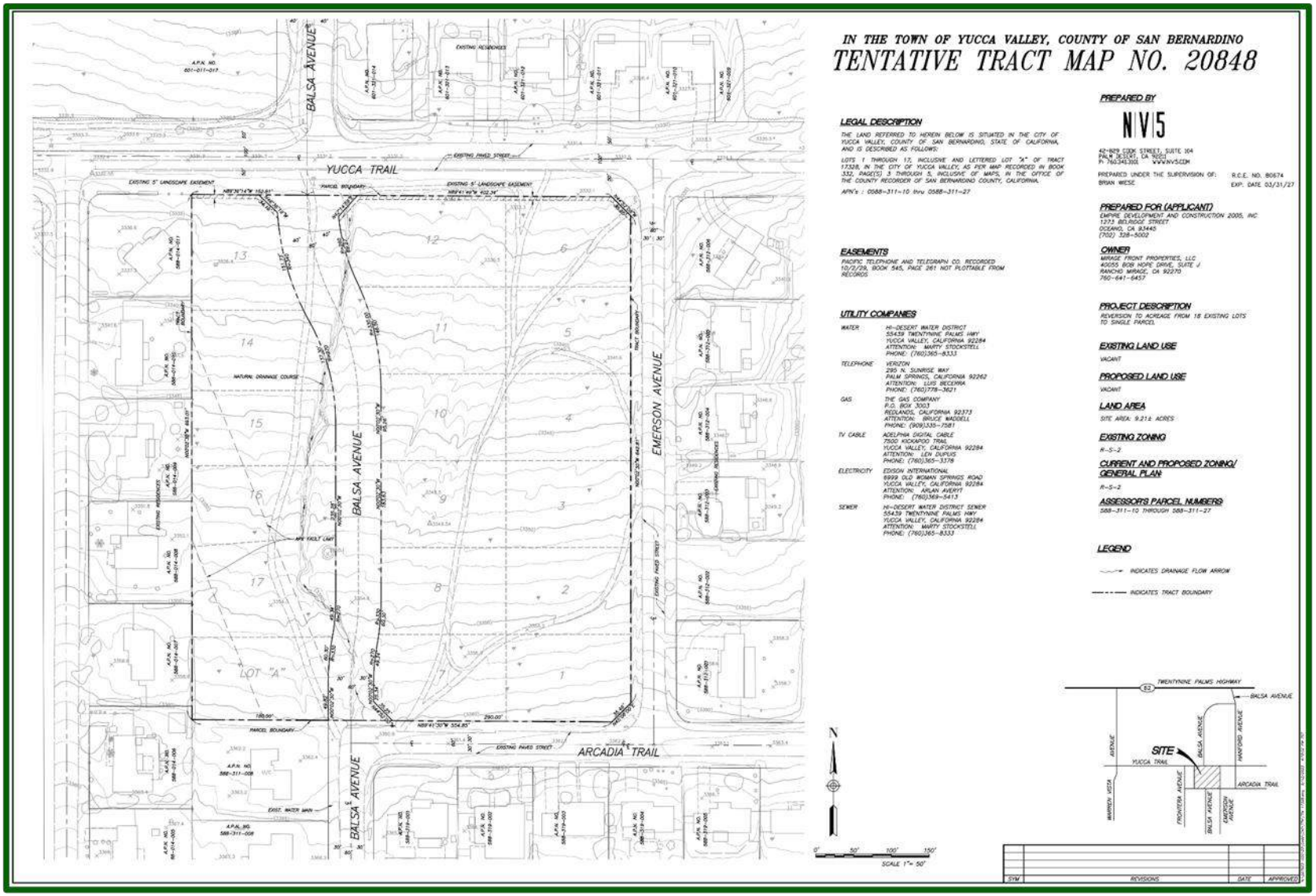


Figure 5. Tentative Tract Map to Revert to Acreage

Executive Summary

Circle Mountain Biological Consultants, Inc. was contracted by Empire Development & Construction, Inc (Proponent) to perform a focused survey for Agassiz's desert tortoise and western Joshua tree, habitat assessment for burrowing owl, and a general biological resource assessment on a parcel located in the Town of Yucca Valley, San Bernardino, California (see Figures 1 and 2). TT 17328 is a 10-acre± parcel located in Yucca Valley, southwest of the intersection of Yucca Trail and Emerson Ave. The legal description for the subject property is Township 1S, Range 6E, a portion of the NW¼, of the NW¼ of Section 6 S.B.B.&M. The Proponent plans to reverse the tentative tract map of the property from 17 lots into acreage comprising a single parcel. No ground disturbance is proposed at this time.

For a total of 12 hours, between 0530 and 1130 on June 21, 2024, Ed LaRue and Susan Seville of CMBC surveyed the site as described herein. This entailed a survey of 18 transects, spaced at 10-meter intervals and oriented in a north and south direction throughout the 10-acre± parcel. As depicted in Figure 2, the site was surveyed with no zone of influence surveys conducted for burrowing owl due to a lack of suitable habitat with urbanization surrounding the 10-acre ± parcel.

Based on DeLorme Topo USA® 10.0 software, elevations on the subject property range from approximately 3,365 feet (1,025 meters) at the south corner down to 3,335 feet (1,016 meters) at the north corner. Terrain is flat. Soils are sandy loam. No USGS-designated blueline streams occur on-site. The 56 plant species identified during the survey are listed in Appendix A. The 3 reptile, 13 bird, and 6 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. In addition, the current project consists of reversion of the property to acreage on a single parcel. As such, no impacts are anticipated, and no mitigation measures are recommended.

Based on the field survey and habitat assessment, and the fact that the project is a paper transaction and will not result in any ground disturbance, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: desert tortoise, burrowing owl, desert kit fox, or American badger. As such, no adverse impacts have been identified and no mitigation measures are recommended.

Table of Contents

**Focused Survey for Agassiz's Desert Tortoise,
Habitat Evaluation for Burrowing Owl, Focused Survey for Joshua Trees,
General Biological Resource Assessment, and
Jurisdictional Waters Analysis for a
10-acre± Site (TT 17328) 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) was contacted by Fred Brilman on behalf of Empire Development & Construction (Proponent) to perform a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessment for burrowing owl (*Athene cunicularia*), focused survey for Joshua tree (*Yucca brevifolia*), and a general biological resource assessment on a 10-acre± site located in the Town of Yucca Valley, San Bernardino County, California (see Figures 1 and 2). This is considered a "resurvey" because the site was first surveyed in 2004 (CMBC 2004c) and again in 2006 (CMBC 2006c). 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 and Joshua tree surveys, 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. TT 17328 is a 10-acre± site located in the Town of Yucca Valley, southwest of the intersection of Yucca Trail and Emerson Ave., San Bernadino California. The legal description for the subject property is Township 1S, Range 6E, a portion of Section 6, S.B.B.&M. The Proponent plans to reverse the tentative tract map of the property from 17 lots into acreage comprising a single parcel. No ground disturbance is proposed at this time.

2.0. Methods

2.1. Literature Review. CMBC consulted materials included in our library to determine the nearest locations of special status plant and animal species that have been reported from the vicinity of the subject property. Between 1989 (Tierra Madre Consultants, Inc. 1989) and the present 2024 study, CMBC has completed approximately 302 focused tortoise surveys in the Morongo Basin area, which comprises the region including Morongo Valley

to the west and Twentynine Palms to the east. Of relevance given their proximity to the subject property are 12 focused tortoise surveys located between approximately 1,600 feet south southeast (CMBC 2006a) and 2,650 feet northwest of the parcel (CMBC 2003c), between 2002 (CMBC 2002) and 2006 (CMBC 2006d), which, along with the subject property, are mapped in Figure 3. These and other materials used in the completion of this report are listed in Section 5.0, below.

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 10-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**, in October 2020, the California Fish and Game Commission accepted as complete a petition to list Joshua tree as a California Endangered Species. The Commission had a year to consider the petition and publish its determination, which was expected in October 2021 but has still not been resolved. In the meantime, CDFW has provided guidance[1] and an Excel spread sheet that contains specific information they want, such as tree height, dead versus alive, locations, photographs, etc. LaRue and Seville recorded locations of 146 Joshua trees using Garmin global positioning system (GPS) units, which have a horizontal accuracy of 2 to 3 meters. The tabulated information and photographs for each Joshua tree are included in Appendix E.

2.2.2. *Field Survey Methods*. For a total of 12 hours, between 05:30 and 11:30 am on 21 June 2024, Ed LaRue and Susan Seville of CMBC surveyed the site. This entailed a survey of 18 transects, spaced at 10-meter (30-foot) intervals and oriented along a north-south axis throughout the 10-acre± parcel. 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).

As the site was surveyed, LaRue kept tallies of observable human disturbances encountered on the nine transects he surveyed. The results of this method provide *encounter rates* for observable human disturbances. For example, two roads observed on each of 10 transects yields a tally of 20 roads (i.e., two roads encountered 10 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 reported from the region.

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.

Table 1. Weather Summary Data for the Survey

Date 2024	Begin to End = Total hours*	Weather Conditions	
		Beginning	Ending
6/21	0530 to 11:30 = 12 hrs	64°F, no wind, 0% cloud	92°F, 2 ↑ 6 mph, 0% cloud

*Total hours = Six hours multiplied by two for the two biologists surveying the site = 12 hours.

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, plant 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. ©2024Google™ Earth was accessed via the internet to provide available aerial photographs of the subject property and surrounding areas (Figure 4).

[1] (see https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/Census-Instructions)

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 1,025 meters (3,365 feet) at the south boundary down to 1,016 meters (3,335 feet) at the north boundary. 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 56 plant species identified during the survey are listed in Appendix A. Dominant perennials are creosote bush (*Larrea tridentata*), burrobush (*Ambrosia dumosa*), Nevada joint-fir (*Ephedra nevadensis*), and paper-bag bush (*Salazaria Mexicana*). Additionally, there are four common cactus species, including silver cholla (*Cylindropuntia echinocarpa*), pencil cholla (*Cylindropuntia ramosissima*), hedgehog cactus (*Echinocereus engelmannii*), and beavertail cactus (*Opuntia basilaris*). That 13 of the 71 species (18%) observed are nonnative to California is indicative of the degraded nature of the site.

3.1.2. *Common Fauna*. The 3 reptile, 13 bird, and 7 mammal species identified during the survey are listed in Appendix B. The three reptiles included common side-blotch lizard (*Uta Stansburiana*), western whiptail (*Cnemidophorus tigris*), and desert spiny lizard (*Sceloporus magister*). Bird species that are either tolerant of or benefited by human development included common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), rock dove (*Columba livia*), Say's phoebe (*Sayornis saya*), Eurasian collard-dove (*Streptopelia decaocto*), house sparrow (*Passer domesticus*), and northern mockingbird (*Mimus polyglottos*). Small mammals observed or detected included antelope ground squirrel (*Ammospermophilus leucurus*) and kangaroo rat (*Dipodomys* sp.). California ground squirrels (*Otospermophilus beecheyi*) would not be present in pristine habitat, so there presence is indicative of degraded habitats. The only predator was bobcat (*Lynx rufus*).

3.2. Uncommon Biological Resources.

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

Encounter rates for observable human disturbances included (in descending order of prevalence) 28 dumps, 19 roads/trails, 6 cross country vehicle tracks, 2 domestic dogs, and 1 rifle shell. Most of the dumps were discarded vegetation, likely from neighboring residents. As shown in Figure 4, there are both roads and trails throughout the site. With only six vehicle tracks, most of the vehicle activity is on the roads and trails. Given the prevalence of residential development, there were surprisingly few domestic dog signs. Only one rifle shell was detected, which is to be expected as the site is within the town limits and surrounded by residences, so it may have been older.

Since 1989, CMBC personnel have performed approximately 302 focused tortoise surveys on about 16,000 acres located in the Morongo Basin, between Yucca Valley and Twentynine Palms. As depicted in Figure 3, 12 of these sites have been surveyed within approximately a half mile of the subject property. No tortoise sign was found during the initial survey (CMBC 2004c). On a subsequent survey in 2006 (CMBC 2006c), 46 scats and one burrow of a tortoise were found. Even then the site was surrounded by residences, so CMBC concluded that the tortoise was an escaped pet.

In 2004, CMBC (2004a) found 1 tortoise, 6 carcasses, 14 burrows, and 320 scats on a 525-acre site located 2,500 feet east, northeast of the subject property. A subsequent survey performed in 2023 (CMBC 2023; not included in Figure 3) on an 87-acre portion of the 525-acre site failed to find any tortoise sign onsite. CMBC did find two older scats of an adult tortoise 60 meters south of the 87-acre site. These observations support the conclusion that tortoises are disappearing from the region surrounding the subject property. For example, similar to the subject property, tortoise sign found on a nearby 35-acre site (CMBC 2003a) was not present when that site was resurveyed in 2005 (CMBC 2005). CMBC suspects that the tortoise sign found on the subject property in 2006 (CMBC 2006c), which included 46 scats and a pallet burrow, was deposited by an escaped pet tortoise.

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.

The subject property is approximately 24 miles west of the nearest CDNCL-designated lands located in the Pinto, Lucerne Valley, and Eastern Slopes CDNCL subarea. As per the official DRECP website (www.drecp.org) and Appendix B, which depicts boundaries of management areas, the subject property is located 24 miles west of the nearest desert tortoise ACEC, which is the Pinto Mountains ACEC. The site is not found within Agassiz's desert tortoise critical habitat, which was designated in 1994 (U.S. Fish and Wildlife Service 1994a). The nearest critical habitat area is the Pinto Mountains Critical Habitat Unit, which is located approximately 24 miles east of the site.

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." There were no regulatory agency-designated special status species that were identified during the current survey. However, the following species have been reported from the region. Life history and occurrence information for rare species observed on one or more of the sites depicted in Figure 3 are given in the next few subsections.

Cooper's hawk (*Accipiter cooperi*) is a year-round resident raptor species that is designated as a Watch List species by CDFW (2024c). Cooper's hawks have been observed on two nearby sites, including 2,000 feet west (CMBC 2006d) and 2,300 feet east (CMBC 2006b) (Figure 3). There are not any nesting sites on the subject property but there are foraging habitats throughout, and plenty of small and medium-sized birds on which Cooper's hawks can prey.

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). They were observed on the 525-acre site located 2,500 feet to the east (CMBC 2004a), 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 throughout the subject property.

Loggerhead shrike (*Lanius ludovicianus*) is designated as a California Species of Special Concern by CDFW (2024c) and a Bird of Conservation Concern by the USFWS (2008). Of the sites mapped in Figure 3, shrikes have been observed on the 525-acre site to the east (CMBC 2004a), and on the unmapped, 87-acre site within this larger site (CMBC 2023). Having been observed 44 times by CMBC personnel between 1989 and 2024, this has been the most frequently encountered rare bird species in the Morongo Basin. There are suitable nesting substrates and foraging habitats for loggerhead shrikes throughout the subject property.

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.

In the case of the subject property, there was no evidence of burrowing owl. The site is too densely vegetated to be suitable. Regionally, CMBC has detected burrowing owls on 13 sites in Joshua Tree, 11 sites in Twentynine Palms, 5 sites in the Landers/Yucca Mesa area, and at only one site in Yucca Valley. In 2006 (CMBC 2006e), CMBC observed a burrowing owl approximately one mile north of the subject property. Like so many observations, this one was observed in a barren area, in the bank of an old borrow pit where the vegetation had been mechanically removed. In more than 110 focused surveys within the Town limits of Yucca Valley, this is the only survey where burrowing owl was detected. So, as given above, the site is considered too densely vegetated to be suitable for burrowing owl, which is determined to be absent.

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. There are two dry washes on the subject property.

3.3.2. *Jurisdictional Waters Analysis*. This section is intended to serve as a jurisdictional waters analysis for the subject property. The approach taken in the field, following review of aerial photographs to ascertain any suspect washes, was to take photographs at approximately 30-meter intervals, list the dominant plant species at each point, and as nearly as possible, measure the width of the wash channel at each location. Two areas were identified as potential washes, including an eastern wash and a western wash.

Common names for dominant perennial plants (see Appendix A for scientific names) observed at each of the 18 places where photographs (Appendix F) and measurements were taken are given below in Table 2. The two biologists using their experience and judgement measured the widths in meters of the two braided drainage channels, which in many places were sufficiently nondescript that it made taking definitive measurements difficult. In Table 2, we have shown plants facultatively associated with washes in blue (e.g., may be found in upland areas but have an affinity for washes) and upland plants in green. The numbers in the first column correspond to the numbers in the photographs in Appendix F.

Table 2. Data for Potential CDFW Jurisdictional Waters Analysis

Eastern Wash			
No.	**Depth**	**Width**	**Dominant Perennials**
1E	0	1.0m	none
2E	0	0.75m	Creosote bush
3E	0	0.5m	Adenophyllum
4E	23cm	0.5m	California buckwheat, Joshua tree
5E	50cm	0.8m	Paper-bag bush
6E	56cm	1.25m	Paper-bag bush, Cheesebush
7E	78cm	1.25m	Paper-bag bush
8E	69cm	0.6m	Creosote bush, Desert willow
Western Wash			
1W	5cm	0.5m	Creosote bush
2W	0cm	1.0m	Creosote bush, Desert willow
3W	1.5m	1.75m	Paper-bag bush, California buckwheat
4W	1.44m	4.4m	California buckwheat, Desert willow
5W	1.73m	1.5m	California buckwheat
6W	2.75m	1.4m	Paper-bag bush, California buckwheat
7W	1.8m	1.4m	Paper-bag bush, Cooper's goldenbush
8W	1.1m	1.3m	Paper-bag bush, California buckwheat, Mohave horsebrush, white rhatany
9W	0.25m	1.7m	Desert willow
10W	0.25	1.7m	Desert willow

Hydrologic activity is another factor to be considered in determining if a given feature may be associated with jurisdictional waters. Such features may include wash-cut banks, accumulations of debris, striated hard-packed soils associated with sheet flow, etc. Whereas the eastern wash was almost nondescript to the north with a little definition to the south, the western wash was deeply incised and showed evidence of significant water flows resulting from runoff from Balsa Avenue.

Plants are the main determining factor that leads CMBC to conclude that the eastern wash is NOT jurisdictional while the western wash likely is jurisdictional. The presence of desert willows (*Chilopsis linearis*), scale-broom (*Lepidospartum squamatum*), and Emory's baccharis (*Baccharis emoryi*) are indicative of sufficient water to support these mesic-adapted species.

Ultimately, it is CDFW's prerogative and authority to judge what are and are not jurisdictional waters. CMBC has endeavored to provide sufficient information and data for CDFW to make this determination. Given the above information and photographs in Appendix F, it is our professional opinion that the western wash has the criteria associated with jurisdictional waters, while the eastern wash does not.

3.3.3. *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.

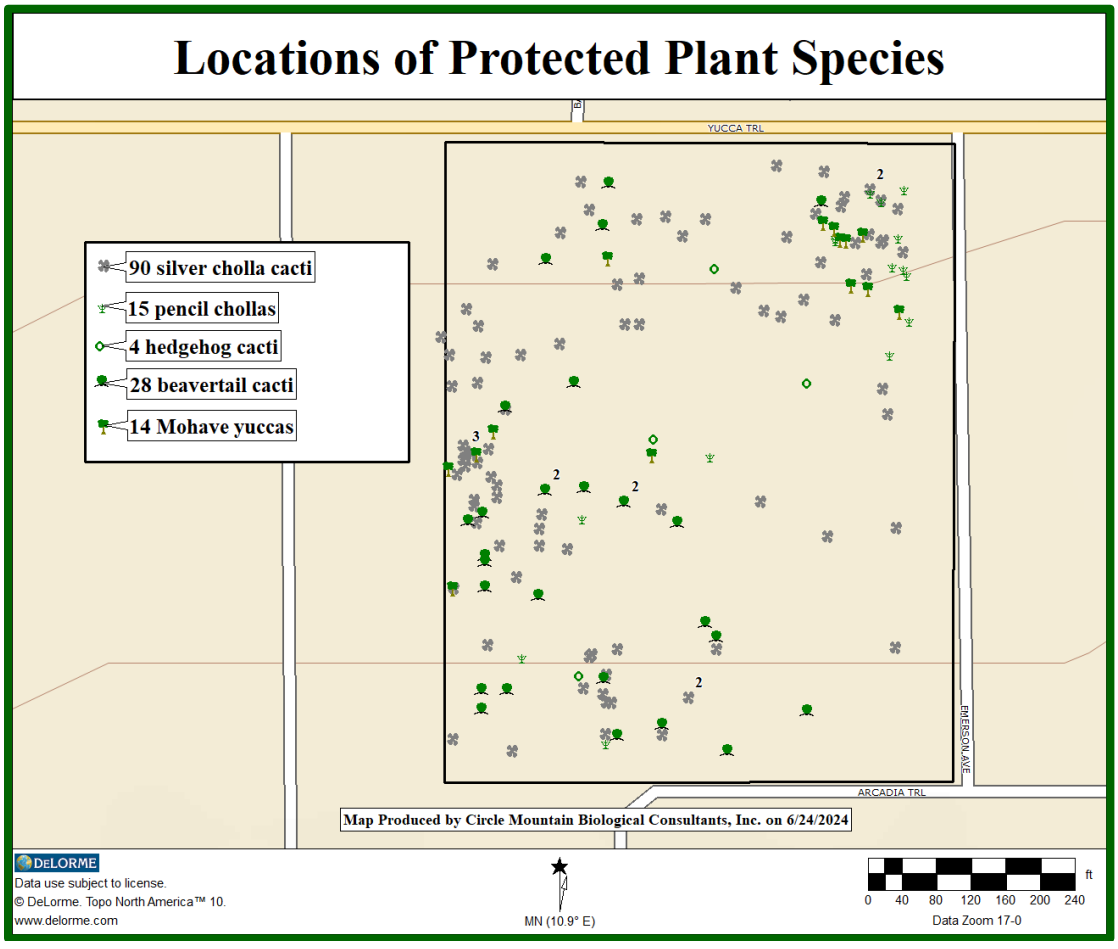
Regulated Desert Native Plants include (those that occur onsite are highlighted in red)**:**

- 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 shidigeria*)
  - 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, nolinas, 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 (Psorothamnus) spinosa* (smoke tree).
(i) *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

Joshua tree, Mohave yucca, desert willow, silver cholla, pencil cholla, hedgehog cactus, and beavertail cactus are the plant species included in one or both above lists that were observed on the subject property. Their locations are plotted in the following map.



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 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. In addition, since the Proponent plans to revert the tentative tract lots to a single parcel, the project is considered a paper transaction and no impacts to the species or its habitat will occur.

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 June 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.

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*. Since the project is a paper transaction, and no site disturbance is anticipated at this time, and 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: Burrowing owl. As such, no adverse impacts have been identified, and no mitigation measures are recommended.

Those species identified during previous surveys in the region for which suitable foraging and/or nesting habitats are present include Cooper's hawk, LeConte's thrasher, and loggerhead shrike. None of these species should be impacted by the project since no ground disturbance will result from the reversion of the property to acreage.

4.2.2. *Other Protected Biological Resources.*

4.2.2.a. Stream Courses. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Fish and Game Code section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, including many dry washes in desert regions.

No disturbance of the site (or the steam courses on the site) is planned under the current project. In case of later development, CMBC has documented data along two potential jurisdictional stream courses, including measurements of the channels, dominant plants at each point, and photographs at regular intervals, and in that case, if CDFW determined that the planned development would substantially adversely affect fish and wildlife resources reliant on either of these water courses, a Streambed Alteration Agreement would need to be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with CEQA. The proponent could than proceed with the activity in accordance with the final Agreement. The form is available at the footnote below[2]. The completed form is sent along with the field baseline data (i.e., this report) to CDFW, Inland Deserts Region, Streambed Alteration, 3602 Inland Empire Boulevard, Suite C-220, Ontario, California 91764.

4.2.2.b. Protected Plants. It is beyond the scope of this focused survey and general resource assessment to provide a proposed program to minimize and mitigate impacts to protected native desert plants. Under the current planned reversion to acreage, no impacts to protected plants would occur. In the case of later site development, the Town typically requires a Desert Native Plant Assessment to identify the numbers and locations of protected plants (provided herein) to comply with the California Native Plant Protection Act. Joshua tree, Mohave yucca, desert willow, silver cholla, pencil cholla, hedgehog cactus, and beavertail cactus are species found on-site that may be subject to pertinent development codes.

Joshua trees are a Candidate for state listing as Endangered and are protected under the Western Joshua Tree Conservation Act. If future development occurs, any impacts to Joshua trees would require completion of an incidental take permit (ITP) before site development could proceed. Appendix E provides all the baseline data and information needed to complete the ITP. The conversion of the site to acreage allows for the development of a single family residence and four accessory structures. According to the engineer (Brian Wiese, NV5, pers. comm. 2/6/2026), based on the possible locations shown on the conceptual grading plan, this is feasible without the need for an ITP. If future development or map actions are proposed that would require an ITP, an initial study to determine if site development will result in any adverse impacts to rare biological resources would be required at that time.

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). No disturbance is anticipated from the project. If future development of the site is planned, a nesting bird survey would be required.

[2] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3754&inline=1

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. 2002. General biological survey and focused desert tortoise survey on a 5.89-acre parcel (APN 601-011-08) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of Mr. Neil Phelps. Job 02-022. Wrightwood, CA.

Circle Mountain Biological Consultants. 2003a. General biological survey and focused survey for desert tortoise on Tract 11740 in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty and Ed LaRue on behalf of Mr. Bob Koste. Job 03-009. Wrightwood, CA. (Same as Job 05-035, #107).

Circle Mountain Biological Consultants. 2003b. General biological survey and focused desert tortoise survey on a 5.31-acre parcel (APN 601-011-07) and associated fill areas in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of Mr. Neil Phelps. Job 03-018. Wrightwood, CA.

Circle Mountain Biological Consultants. 2003c. General biological survey and focused desert tortoise survey on a 3.4-acre parcel in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of Mr. Neil Phelps. Job 03-040. Wrightwood, CA.

Circle Mountain Biological Consultants. 2004a. Yucca Valley +/- 525-acre site: Focused desert tortoise survey and general biological inventory. Unpublished report prepared by Ed LaRue on behalf of Century Crowell Communities. Job 04-017. Wrightwood, CA.

Circle Mountain Biological Consultants. 2004b. General biological survey and focused survey for desert tortoise on a +/- 11-acre parcel in the Town of Yucca Valley (Tentative Tract No. 11004, MB 174/67-68 (24 lots)), San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of Superior Real Estate. Job 04-019. Wrightwood, CA. (Same as Job 06-088, #174).

Circle Mountain Biological Consultants. 2004c. General biological survey and focused survey for desert tortoise on a +/- 9-acre parcel (APN 588-311-09) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of WIL-Mark, GP. Job 04-044. Wrightwood, CA. (Same as Job 06-041, #154).

Circle Mountain Biological Consultants. 2005. Focused desert tortoise resurvey on a ±36 acres in the Town of Yucca Valley, San Bernardino County, California. Unpublished letter report prepared by Ed LaRue on behalf of Century-Crowell Communities. Job 05-035. Wrightwood, CA. (Same as Job 03-009, #17).

Circle Mountain Biological Consultants. 2006a. Focused desert tortoise survey and general biological inventory for a 10-acre± site (APNs 0588-042-02 & -03) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Ed LaRue on behalf of Kevin Donaldson, Paul Willems, and Jessica Amber. Job 06-015. Wrightwood, CA.

Circle Mountain Biological Consultants. 2006b. Focused desert tortoise resurvey and general biological inventory for a 130-acre± site (APNs 601-551-26, -28 & -29) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Sharon Dougherty on behalf of Londen Land Company. Job 06-045. Wrightwood, CA. (Same as Job 05-024, #78).

Circle Mountain Biological Consultants. 2006c. Focused desert tortoise resurvey and general biological inventory for a 9-acre± site (APN 588-311-09) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Ed LaRue on behalf of Yucca Valley Estates, LLC. Job 06-041. Wrightwood, CA. (Same as Job 04-044, #55).

Circle Mountain Biological Consultants. 2006d. Focused resurvey for desert tortoise and protected native plant inventory on a 12-acre± site (TT 18421, APNs 0601-601-01 through -24) in the Town of Yucca Valley, California. Unpublished report prepared by Ed LaRue on behalf of Nikolas Ventures Ltd., LLC. Job 06-088. Wrightwood, CA. (Same as Job 04-019, #41).

Circle Mountain Biological Consultants. 2006e. Focused desert tortoise survey and general biological inventory for a 140-acre± site (APNs 0601-041-01 and 0601-021-04, -05, -18, & -19) in the Town of Yucca Valley, San Bernardino County, California. Report prepared by Ed LaRue on behalf of Verismo Investment Group, LLC. Job 06-014. Wrightwood, CA. (Same as #04-045, #56).

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.

Circle Mountain Biological Consultants, Inc. 2023. Focused survey for Agassiz's desert tortoise, habitat evaluation for burrowing owl and Joshua tree, and general biological resource assessment for an 87-acre± site (APNs 0588-041-39, -46, & -47) in the Town of Yucca Valley, San Bernardino County, California. Unpublished report prepared by Ed LaRue on behalf of NV5. Job 23-025. Wrightwood, CA. Smaller part of Job #04-017.

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.

GNETAE	GNETAE
Ephedraceae	**Joint-fir family**
Ephedra nevadensis	Nevada joint-fir
ANGIOSPERMAE: DICOTYLEDONES	DICOT FLOWERING PLANTS
Asteraceae	**Sunflower family**
Adenophyllum cooperi	Adenophyllum
Ambrosia acanthicarpa	Annual bur-sage
Ambrosia dumosa	Burrobush
Ambrosia salsola	Cheesebush
Baccharis emoryi	Emory baccharis
Baileya sp.	Marigold
Bebbia juncea	Sweetbush
Ericameria cooperi var. *cooperi*	Cooper's goldenbush
**Lactuca serriola*	Wild lettuce
Lepidospartum squamatum	Scale-broom
Stephanomeria exigua	Milk aster
Tetradymia stenolepis	Mohave horsebrush
Bignoniaceae	**Bigonia family**
Chilopsis linearis ssp. *arcuata*	Desert willow (PPS)
Boraginaceae	**Borage family**
Amsinckia tessellata	Fiddleneck
Brassicaceae	**Mustard family**
**Brassica tournefortii*	Saharan mustard
**Descurainia sophia*	Flixweed
**Sisymbrium altissimum*	Tumble mustard
**Sisymbrium irio*	London rocket
Cactaceae	**Cactus family**
Cylindropuntia echinocarpa	Silver cholla (PPS)
Cylindropuntia ramosissima	Pencil cholla (PPS)
Echinocereus engelmannii	Hedgehog cactus (PPS)
Opuntia basilaris	Beavertail cactus (PPS)

Chenopodiaceae	**Goosefoot family**
Atriplex canescens	Four-winged saltbush
Atriplex polycarpa	Allscale
**Salsola tragus*	Russian thistle
Cucurbitaceae	**Gourd family**
Cucurbita palmata	Coyote gourd
Euphorbiaceae	**Spurge family**
Croton californicus	Croton
Euphorbia polycarpa	Sandmat
Fabaceae	**Pea family**
Hoffmannseggia microphylla (*Caesalpinia virgata*)	Caesalpinia
Parkinsonia aculeata	Mexican palo verde
Geraneaceae	**Geranium family**
**Erodium cicutarium*	Red-stemmed filaree
Krameriaceae	**Krameria family**
Krameria (*grayi*) *bicolor*	White rhatany
Krameria erecta	Pima rhatany
Lamiaceae	**Mint family**
Salvia columbariae	Chia
Sambucus nigra ssp. *caerulea* (*Salazaria mexicana*)	Paper-bag bush
Malvaceae	**Mallow family**
Sphaeralcea ambigua	Desert mallow
Nyctaginaceae	**Four o'clock family**
Allionia incarnata	Trailing windmills
Polemoniaceae	**Phlox family**
Eriastrum c.f. *sapphirinum*	Woolly star
Polygonaceae	**Buckwheat family**
Eriogonum c.f. *davidsonii*	Davidson buckwheat
Eriogonum fasciculatum	California buckwheat
Eriogonum nidularium	Whiskbroom
Rosaceae	**Rose family**
Coleogyne ramosissima	Blackbush
Solanaceae	**Nightshade family**
Datura wrightii	Jimsonweed
Lycium andersonii	Anderson's box-thorn
Lycium cooperi	Peach thorn

Zygophyllaceae	**Caltrop family**
Larrea tridentata	Creosote bush
ANGIOSPERMAE: MONOCOTYLEDONES	MONOCOT FLOWERING PLANTS
Liliaceae	**Lily family**
Yucca brevifolia	Joshua tree (PPS)
Yucca schidigera	Mojave yucca (PPS)
Poaceae	**Grass family**
**Bromus diandrus*	Common ripgut-grass
**Bromus madritensis* ssp. *rubens*	Red brome
**Bromus tectorum*	Cheat grass
**Bromus* (*trinii*) *berteroanus*	Chilean grass
**Hordeum murinum*	Hare barley
Pleuraphis rigida	Big galleta
**Schismus* sp.	Split-grass
Stipa (*Achnatherum*) *speciosa*	Desert needlegrass

* - 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 (199), 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	REPTILES
Iguanidae	**Iguanids**
Sceloporus magister	Desert spiny lizard
Uta stansburiana	Common side-blotched lizard
Teiidae	**Whiptails**
Cnemidophorus tigris	Western whiptail
AVES	BIRDS
Columbidae	**Pigeons and doves**
Columba livia	Rock dove
Streptopelia decaocto	Eurasian collared-dove
Zenaida macroura	Mourning dove
Trochilidae	**Hummingbirds**
Calypte costae	Costa's hummingbird
Tyrannidae	**Tyrant flycatchers**
Sayornis saya	Say's phoebe
Myiarchus cinerascens	Ash-throated flycatcher
Corvidae	**Crows and jays**
Corvus corax	Common raven
Remizidae	**Verdins**
Auriparus flavipes	Verdin
Troglodytidae	**Wrens**
Campylorhynchus brunneicapillus	Cactus wren
Mimidae	**Mockingbirds and thrashers**
Mimus polyglottos	Northern mockingbird
Emberizidae	**Sparrows, warblers, tanagers**
Amphispiza bilineata	Black-throated sparrow
Fringillidae	**Finches**
Carpodacus mexicanus	House finch

Passeridae	**Weavers**
Passer domesticus	House sparrow
MAMMALIA	MAMMALS
Leporidae	**Hares and rabbits**
Lepus californicus	Black-tailed hare
Sylvilagus audubonii	Audubon cottontail
Sciuridae	**Squirrels**
Ammospermophilus leucurus	Antelope ground squirrel
Otospermophilus Beecheyi	California ground squirrels
Heteromyidae	**Pocket mice**
Dipodomys sp.	Kangaroo rat
Felidae	**Cats**
Lynx rufus	Bobcat

Nomenclature follows Stebbins, *A Field Guide to Western Reptiles and Amphibians* (200), 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 21 June 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 Ed LaRue on 21 June 2024 follow.

USFWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET

Date of survey: 6/21/24 (month, day, year) Survey biologist(s): Ed LaRue, Susan Seville

Site description: Empire YV (project name and size; general location)

County: SB Quad: Yucca Valley Location: 11S 555810 3775450 (UTM coordinates, lat-long, and/or TRS; map datum)

Transect #: 15 Transect length: 0.1mi Type of survey: (Dave) (acres to be surveyed; ~~100% coverage~~/probabilistic sampling)

GPS Start-point: 555800 3775450 (easting, northing, elevation in meters) Start time: 0530 am/pm

GPS End-point: 555640 3775460 (easting, northing, elevation in meters) End time: 1130 am/pm

Start Temp: 64°F Weather: calm → 2-6E End Temp: 92°F

Live Tortoises

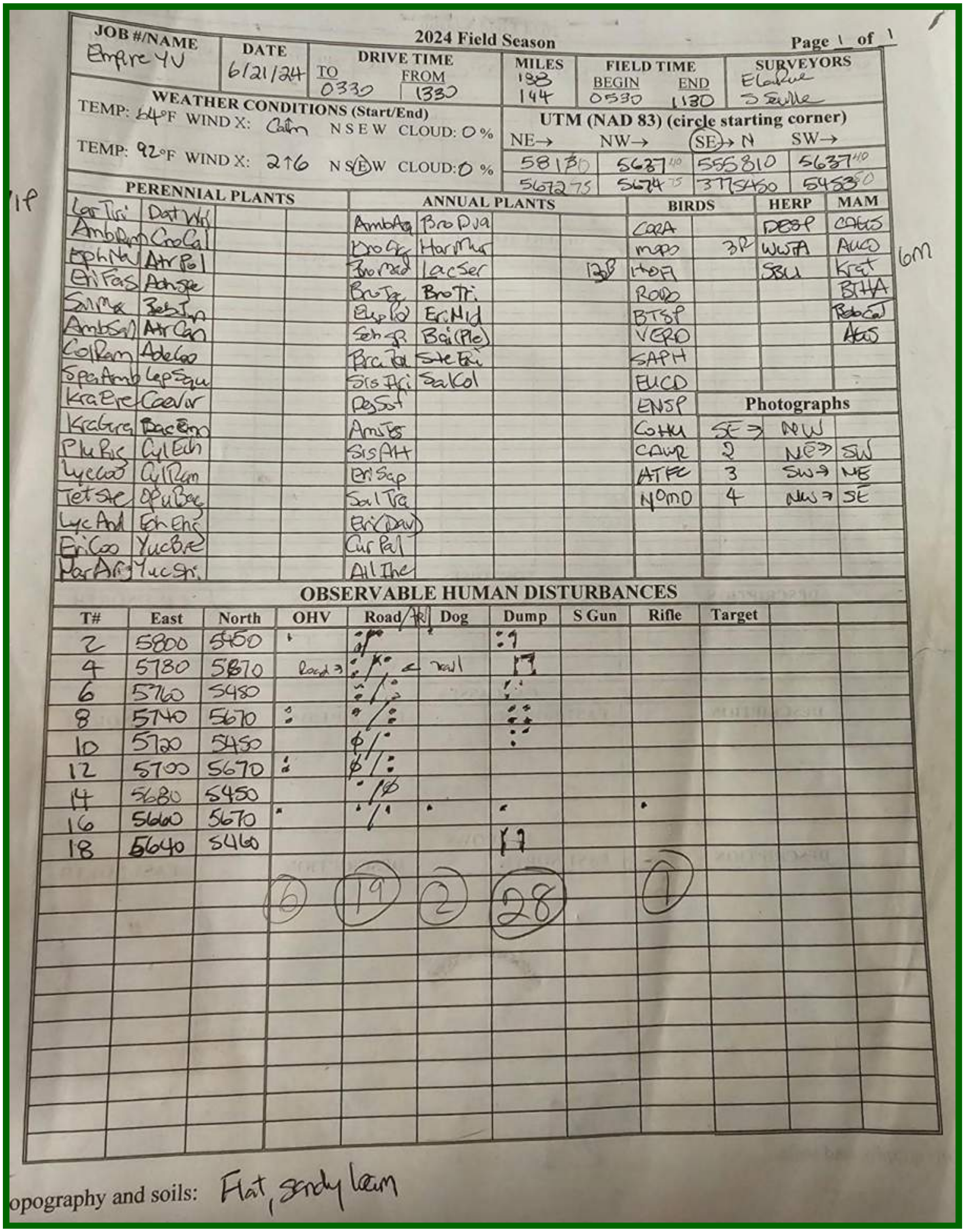
Detection number	GPS location Easting	GPS location Northing	Time	Tortoise location (*in burrow*: all of tortoise beneath plane of burrow opening, or *not in burrow*)	Approx MCL >160-mm? (*Yes, No or Unknown*)	Existing tag # and color, if present
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows[1], scats, carcasses, etc)

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

[1] **See section 4.1.2 for information on burrow condition class and photographing burrows**

December 2009 4-24



JOB #/NAME: Empire YV | DATE: 6/21/24 | 2024 Field Season | Page 1 of 1

DRIVE TIME: TO 0330 FROM 1330 | MILES: 138 / 144 | FIELD TIME: BEGIN 0530 END 1130 | SURVEYORS: E LaRue / S Seville

WEATHER CONDITIONS (Start/End)

TEMP: 64°F WIND X: Calm N S E W CLOUD: 0 %

TEMP: 92°F WIND X: 2↑6 N S (E) W CLOUD: 0 %

UTM (NAD 83) (circle starting corner)

NE→	NW→	(SE)→ N	SW→
58130	563740	555810	563740
567275	567475	3775450	545350

PERENNIAL PLANTS		ANNUAL PLANTS		BIRDS		HERP	MAM
LarTri	DatWri	AmbAca	BroDia	CORA		DESP	CAGO
AmbDum	CroCal	BroGra	HarMur	MOPO	3P	WWTA	AUCO
EphNev	AtrPol	BroMad	LacSer	HOFI	12B	SBLI	Krat
EriFas	AchSpe	BroTec	BroTri	RODO			BTHA
SalMex	BebJun	EupPol	EriMid	BTSP			BobCat
AmbSal	AtrCan	SchBar	Boi(Ple)	VERD			AGS
ColRam	AdeCoo	BraTou	SteExi	SAPH			
SphAmb	LepSqu	SisIri	SalCol	EUCD			
KraEre	CaeVir	PecSet		ENSP			
KraGra	BacEmo	AmsTes		COHU			
PluRic	CylEch	SisAlt		CAWR			
LycCoo	CylRam	EriSap		ATFC			
TetSte	OpuBas	SalTra		NOMO			
LycAnd	EphEnc	Eri(Dav)					
EriCoo	YucBre	CurPal					
MarArg	YucSch	AllThe					

Photographs

SE →	NW
2	NE → SW
3	SW → NE
4	NW → SE

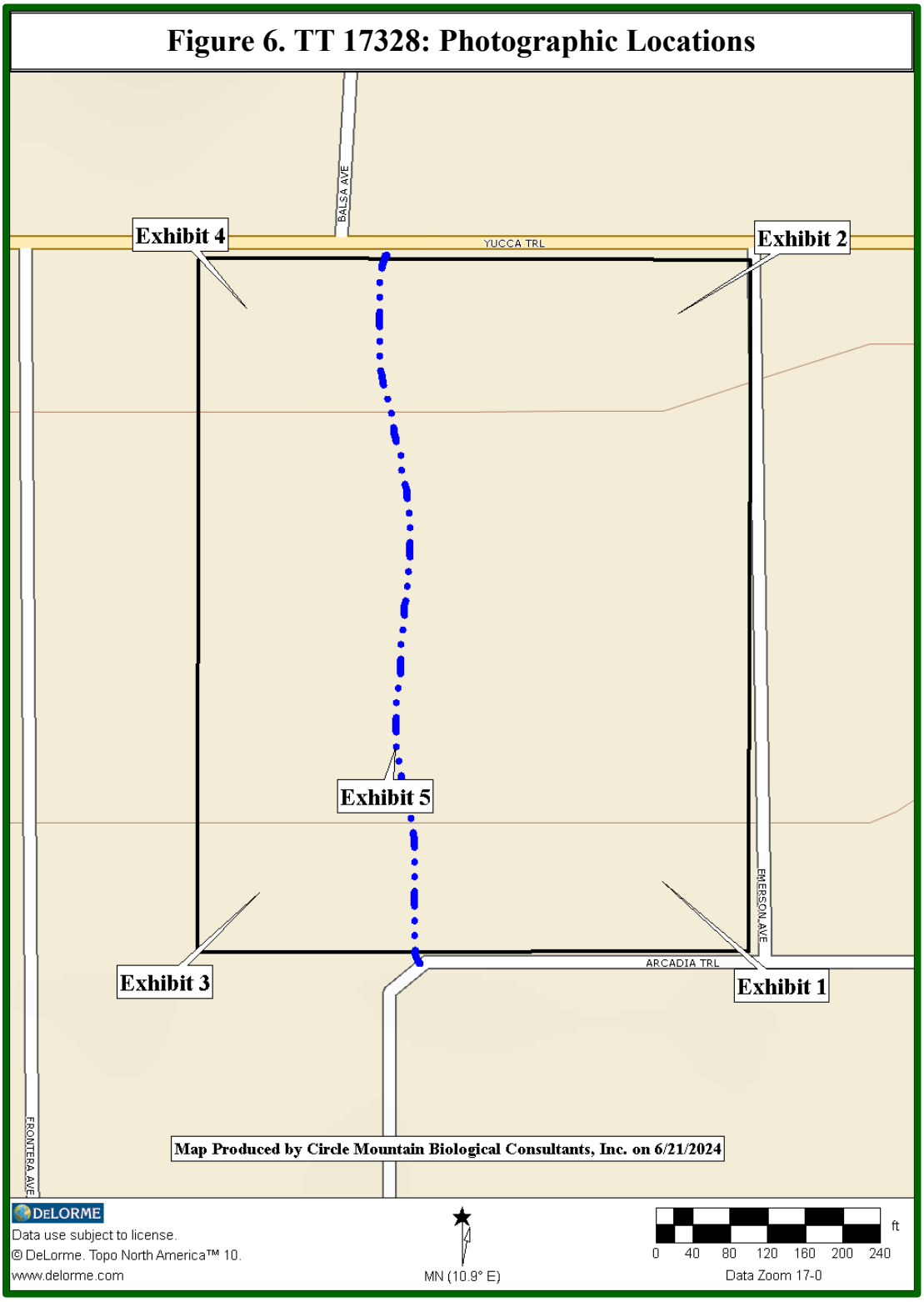
OBSERVABLE HUMAN DISTURBANCES

T#	East	North	OHV	Road/Trl	Dog	Dump	S Gun	Rifle	Target
2	5800	5450							
4	5780	5870	Road →	← trail					
6	5760	5480							
8	5740	5670							
10	5720	5450							
12	5700	5670							
14	5680	5450							
16	5660	5670							
18	5640	5460							
			6	19	2	28		1	

Topography and soils: Flat, sandy loam

Appendix D. Photographic Exhibits

Figure 6. TT 17328: Photographic Locations



Locations of the five photographic exhibits on the next three pages are depicted in Figure 5.

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

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

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

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

Exhibit 5. Mature desert willow and scale-broom plants observed along western wash.

Appendix E. Western Joshua Tree Analysis

1.0. Introduction

1.1. Purpose and Need for Study. In October 2020, the California Fish and Game Commission accepted as complete a petition to list Joshua tree 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 western Joshua trees under certain circumstances."

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. This appendix is supplemental to CMBC's general biological survey, dated March 2024, and may be submitted separately to CDFW as needed.

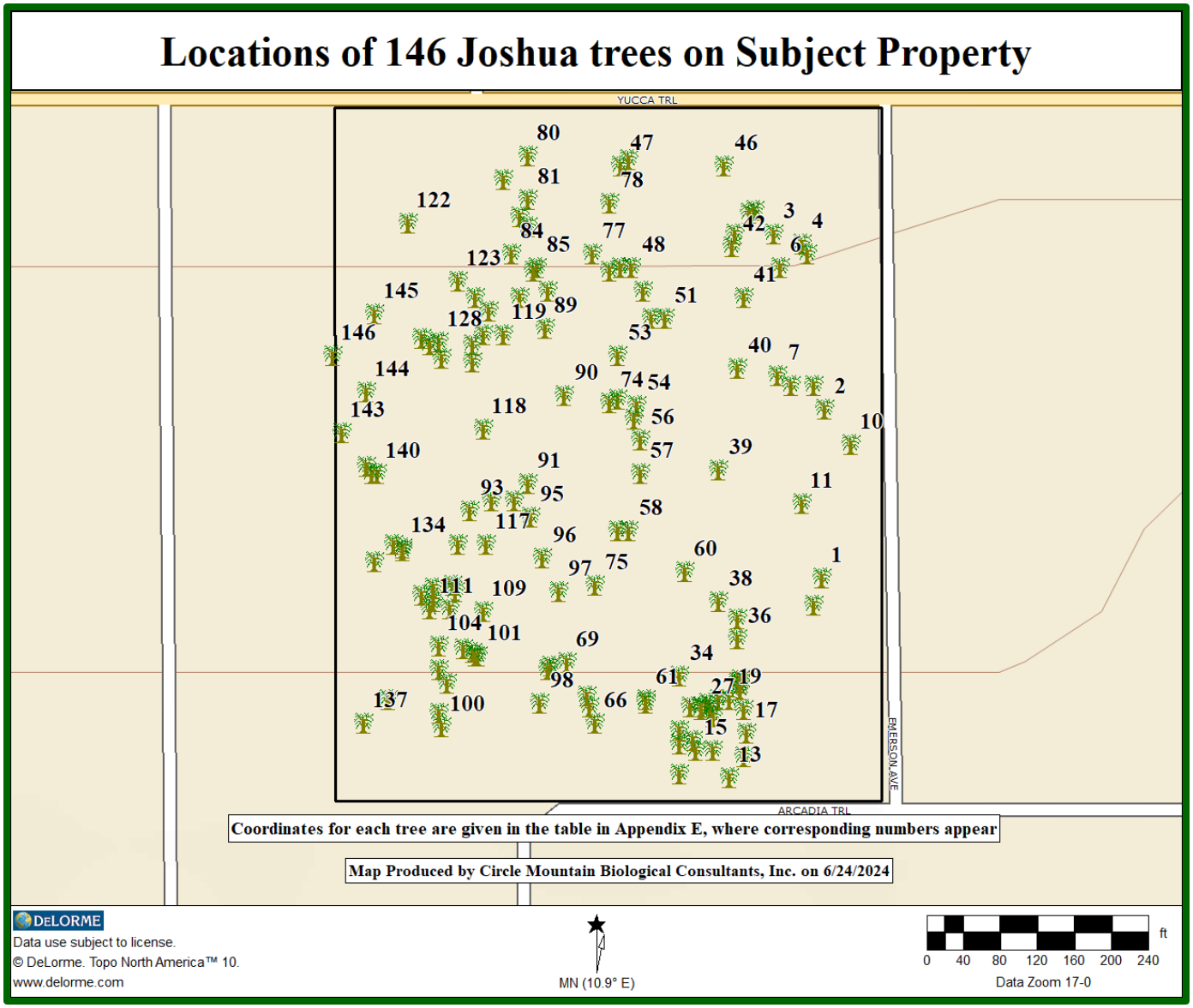
2.0. Methods

An evaluation of individual Joshua trees was conducted according to census instructions pertaining to the WJTCA [Fish and Game Code section 1927.3, subdivision (a)(1)] by Ed LaRue and Margaret Adam on February 27, 2024, between 08:30 and 1730. Global positioning system (GPS) coordinates were taken for each western Joshua tree (WJT) found on the site using a hand-held GPS unit. No trees were found within 50 feet of the site boundaries.

The height of each tree was estimated using a wooden pole marked at one-quarter meter intervals for scale. Height class for the WJT was noted (Class 1: <1 m; Class 2: >1 m and < 5 m; Class 3: ≥ 5m). Each trunk was recorded as a separate tree with its own unique identifier (e.g., there were three trunks associated with Joshua tree #4, so each trunk is considered as a separate entity). Each WJT was classified as to its maturity. Mature trees are defined as trees which have produced flowers/fruits in the past. Each WJT was also photographed.

3.0. Results

One hundred and forty-six (146) WJT were recorded throughout the site and are depicted in the figure on the next page and described in the table on the page that follows that.


Locations of 146 Joshua trees on Subject Property
YUCCA TRL
EMERSON AVE
ARCADIA TRL
80
47
46
81
78
122
3
42
4
84
77
48
85
6
123
41
145
51
89
119
128
146
53
40
7
144
90
74
54
2
143
118
56
10
140
57
39
91
11
93
95
58
134
117
96
60
1
97
75
38
111
109
36
104
101
69
34
98
61
27
19
137
100
66
17
15
13
Coordinates for each tree are given in the table in Appendix E, where corresponding numbers appear
Map Produced by Circle Mountain Biological Consultants, Inc. on 6/24/2024
DeLORME
Data use subject to license.
© DeLorme. Topo North America™ 10.
www.delorme.com
MN (10.9° E)
0 40 80 120 160 200 240
ft
Data Zoom 17-0

These data pertain to the one hundred and forty-six trees found onsite								
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								
#	Latitude	Longitude	Size Class	Height	Live or Dead	Phenology	Mature Tree?	Notes
1	34.11907	116.39492	B	1.5	L	no	no	2 trunks, same size
2	34.11957	116.39491	B	1.75	L	yes	Yes, dried empty stalk	
3	34.12009	116.39509	B	1.4	L	no	no	
4	34.12006	116.39499	B	2.25	L	yes	Yes, dried empty stalk	
5	34.12003	116.39497	B	2.5	L	no	Yes, dried empty stalk	
6	34.11999	116.39507	B	1-1.5	L	no	Yes, dried empty stalk	3 trunks
7	34.11967	116.39508	A-B	.25-1.4	L	no	no	4 trunks
8	34.11964	116.39495	B	3.5	L	yes	Yes, dried empty stalk	
9	34.11964	116.39503	B	3	L	yes	Yes, dried empty stalk	
10	34.11954	116.39438	B	2.5	L	yes	Yes, dried empty stalk	
11	34.11929	116.39499	B	3.5	L	yes	Yes, dried empty stalk	
12	34.11899	116.39495	B	2.25	L	no	no	
13	34.11848	116.39525	B	4	L	yes	Yes, dried empty stalk	
14	34.11854	116.3952	B	2.6	L	yes	Yes, dried empty stalk	
15	34.11856	116.39537	B	2.5	L	yes	Yes, dried	

							empty stalk	
16	34.11856	116.39531	B	2	L	yes	Yes, dried empty stalk	
17	34.11861	116.39519	B	1-1.3	L	no	no	2 trunks
18	34.11868	116.3952	A-B	.25-2.75	L	yes	Yes, dried empty stalk	3 trunks 0.25/1.25/2.75
19	34.11871	116.39525	B	2	L	yes	Yes, dried empty stalk	
20	34.11876	116.39522	B	1.25	L	no	no	
21	34.11876	116.39521	B	2.5	L	yes	Yes, dried empty stalk	
22	34.11877	116.39521	B	2.5	L	no	no	
23	34.11874	116.39521	A	0.25	L	no	no	
24	34.11871	116.39529	A	0.5-0.75	L	no	no	2 trunks
25	34.1187	116.39533	A-B	0.25-3.5	L	yes	Yes, dried empty stalk	2 trunks
26	34.11868	116.39532	B	3.5	L	yes	Yes, dried empty stalk	
27	34.11868	116.39535	B	2	L	yes	Yes, dried empty stalk	
28	34.11868	116.39535	A	0.25	L	no	no	
29	34.11868	116.39535	A	0.4	L	no	no	
30	34.11869	116.39535	B	2.25	L	yes	Yes, dried empty stalk	
31	34.11866	116.39531	B	2.25	L	yes	Yes, dried empty stalk	
32	34.11869	116.39539	B	1-3.25	L	yes	Yes, dried empty stalk	2 trunks 1/3.25 moderate health
33	34.11869	116.39539	B	1	L	no	no	2 trunk 1/1
34	34.11878	116.39543	B	2.25	L	yes	Yes, dried	

							empty stalk	
35	34.11859	116.39538	B	2.75	L	yes	Yes, dried empty stalk	
36	34.11889	116.39522	B	2.5	L	yes	Yes, dried empty stalk	
37	34.11895	116.39522	B	2	L	no	no	
38	34.119	116.39529	A-B	0.3-2	L	yes	Yes, dried empty stalk	3 trunks 0.3/1.5/2
39	34.11939	116.39529	A	0.75	L	no	no	
40	34.11969	116.39522	B	1	L	no	no	moderate health
41	34.1199	116.3952	A	0.5	L	no	no	
42	34.12005	116.39524	B	2	L	yes	Yes, dried empty stalk	
43	34.12009	116.39523	A-B	0.5-1.25	L	no	no	2 trunks 0.5-1.25
44	34.12016	116.39516	B	1.0-1.25	L	yes	no	3 trunks
45	34.12015	116.39518	-	0	D			
46	34.12029	116.39527	-	0	D			
47	34.12029	116.39564	-	0	D			
48	34.11999	116.3956	A	0.75	L	no	no	
49	34.11992	116.39556	A	0.75	L	no	no	
50	34.11998	116.39568	B	2.25	L	no	no	
51	34.11984	116.39548	-	0	D			
52	34.1198	116.39553	A-B	0.3-1.3	L	no	no	5 trunks 0.3(4)/1.3
53	34.11973	116.39565	A	0.5	L	no	no	
54	34.11958	116.39558	B	1.2	L	no	no	
55	34.11954	116.39559	B	1.25	L	no	no	2 trunks
56	34.11948	116.39557	A-B	0.5-1.3	L	no	no	3 trunks 0.5/1.3/1
57	34.11938	116.39557	A-B	0.1-2.5	L	yes	Yes, dried empty stalk	4 trunks
58	34.11921	116.39561	A-B	0.3-1	L	no	no	4 trunks 0.3/1/0.5/0.5
59	34.11921	116.39565	B	2.25	L	no	no	
60	34.11909	116.39541	-	0	D			
61	34.11871	116.39555	B	2.25	L	yes	Yes, dried empty stalk	
62	34.1187	116.39555	A	0.3	L	no	no	
63	34.11862	116.39543	A	0.25	L	no	no	
64	34.11858	116.39543	-	0	D			
65	34.11849	116.39543	B	2.25-2.75	L	yes	Yes, dried	2 trunks 2.25/2.75

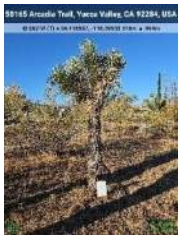
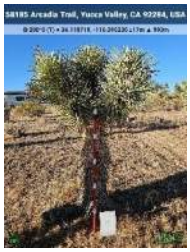
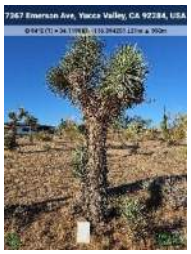
							empty stalk	
66	34.11864	116.39573	B	2	L	no	no	
67	34.11869	116.39575	B	2.6	L	yes	no	
68	34.11872	116.39576	A-B	0.5-2.0	L	no	no	2 trunks
69	34.11882	116.39583	A-B	0.3-2.5	L	yes	Yes, dried empty stalk	3 trunks
70	34.1188	116.3959	A	0.1	L	no	no	
71	34.11881	116.39589	B	2.7	L	yes	Yes, dried empty stalk	
72	34.1196	116.39565	A-B	0.75-2	L	no	no	3 trunks
73	34.1196	116.39565	B	2.25	L	no	no	
74	34.11959	116.39568	B	1.2	L	no	no	
75	34.11905	116.39573	-	0	D			
76	34.11999	116.39564	B	2.5	L	no	no	
77	34.12003	116.39574	B	1.25	L	no	no	
78	34.12018	116.39568	B	1.3	L	no	no	
79	34.12031	116.39561	-	0	D			
80	34.12032	116.39597	-	0	D			
81	34.12019	116.39597	B	1	L	no	no	
82	34.12014	116.396	B	1	L	no	no	
83	34.12011	116.39597	B	2	L	no	no	
84	34.12003	116.39603	A	0.8	L	no	no	
85	34.11999	116.39594	A-B	0.75-1	L	no	no	3 trunks
86	34.11998	116.39595	B	4	L	yes	Yes, dried empty stalk	
87	34.11992	116.3959	B	1.5	L	no	no	
88	34.1199	116.396	A	0.8	L	no	no	3 trunks
89	34.11981	116.39591	B	1.15-1.5	L	no	no	3 trunks
90	34.11961	116.39584	A-B	0.5-2	L	yes	Yes, dried empty stalk	2 trunks
91	34.11935	116.39597	B	2.25	L	yes	Yes, dried empty stalk	1 live/ 1 dead
92	34.1193	116.39602	B	2	L	no	no	
93	34.11927	116.39618	B	1.3	L	no	no	
94	34.1193	116.3961	B	2.75	L	yes	Yes, dried empty stalk	
95	34.11925	116.39596	B	2.7	L	yes	Yes, dried	

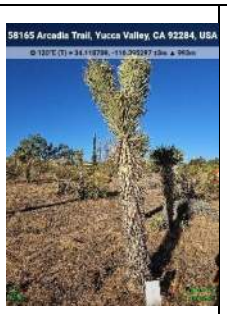
							empty stalk	
96	34.11913	116.39592	B	2.1	L	yes	Yes, dried empty stalk	
97	34.11903	116.39586	B	3	L	yes	Yes, dried empty stalk	
98	34.1187	116.39593	A-B	0.8-3.25	L	yes	Yes, dried empty stalk	2 trunks
99	34.11873	116.39615	B	2.6	L	yes	Yes, dried empty stalk	
100	34.11863	116.39628	B	2.6	L	yes	Yes, dried empty stalk	
101	34.11884	116.39615	B	2	L	no	Yes, dried empty stalk	
102	34.11885	116.39617	B	1.3-4.25	L	yes	Yes, dried empty stalk	6 trunks
103	34.11884	116.39616	A	0.25	L	no	no	
104	34.11887	116.39629	B	4.1	L	yes	Yes, dried empty stalk	
105	34.11886	116.3962	A	0.5	L	no	no	
106	34.1188	116.39629	A	0.9	L	no	no	
107	34.11876	116.39626	B	2.6	L	yes	Yes, dried empty stalk	
108	34.11867	116.39629	A	0.7	L	no	no	
109	34.11897	116.39613	B	2.6	L	yes	Yes, dried empty stalk	
110	34.11898	116.39625	B	2.25	L	yes	Yes, dried empty stalk	
111	34.11898	116.39632	A-B	0.5-2.75	L	yes	Yes, dried empty stalk	4 trunks

112	34.119	116.39631	A	0.75	L	no	no	
113	34.11904	116.39631	B	2.5	L	no	no	
114	34.11905	116.39624	B	1-1.5	L	no	no	
115	34.11903	116.39623	A	0.5	L	yes	Yes, dried empty stalk	
116	34.11902	116.39635	B	2.6	L	no	no	
117	34.11917	116.39612	B	2.4	L	yes	Yes, dried empty stalk	
118	34.11951	116.39613	B	1-1.5	L	no	no	2 trunks
119	34.11979	116.39606	B	2.6	L	yes	no	
120	34.12025	116.39606	B	1	L	no	no	
121	34.12025	116.39606	B	1.5	L	yes	Yes, dried empty stalk	
122	34.12012	116.3964	-	0	D			
123	34.11995	116.39622	-	0	D			
124	34.1199	116.39616	B	3	L	yes	Yes, dried empty stalk	
125	34.11986	116.39611	B	1.75	L	no	no	2 trunks same size
126	34.11979	116.39613	B	2.5	L	yes	Yes, dried empty stalk	
127	34.11976	116.39617	B	2	L	yes	Yes, dried empty stalk	
128	34.11977	116.39629	B	3	L	yes	Yes, dried empty stalk	
129	34.11978	116.39635	B	2.25	L	yes	Yes, dried empty stalk	
130	34.11976	116.39632	A-B	.25-1.25	L	no	no	2 trunks
131	34.11972	116.39628	B	1.4-1.75	L	no	no	2 trunks
132	34.11971	116.39617	B	1.35	L	no	no	
133	34.11917	116.39622	A	0.75	L	no	no	
134	34.11916	116.39642	B	2.8	L	yes	Yes, dried empty stalk	
135	34.11915	116.39642	A	0.5	L	no	no	
136	34.11917	116.39645	A-B	0.75-2.4	L	no	no	2 trunks

137	34.11864	116.39656	B	2.6	L	yes	Yes, dried empty stalk	poor health
138	34.11871	116.39647	B	2.75	L	yes	Yes, dried empty stalk	2 trunks
139	34.11912	116.39652	B	1.5-2.25	L	yes	Yes, dried empty stalk	3 trunks
140	34.11938	116.39651	B	1.75	L	yes	Yes, dried empty stalk	
141	34.11938	116.39653	B	1.25-1.75	L	no	no	2 trunks
142	34.1194	116.39655	-	0	D			
143	34.1195	116.39668	B	4.3	L	yes	Yes, dried empty stalk	
144	34.11953	116.39668	A-B	0.75-3.2	L	yes	Yes, dried empty stalk	5 trunks
145	34.11958	116.39648	A	0.7-0.7	L	no	no	3 trunks same size
146	34.11973	116.39667	B	1.75	L	no	no	

Photographs of the 146 Joshua trees described above are included on the next six pages. The numbers in the lower left hand corner of the photographs correspond to the same numbers given in the first, left hand column of the above table.

 1	 2	 3	 4	 5
 6	 7	 8	 9	 10
 11	 12	 13	 14	 15
 16	 17	 18	 19	 20
 21	 22	 23	 24	 25



26

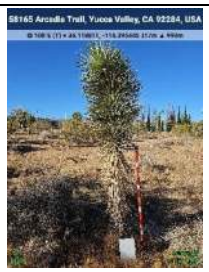
27,28,29

30

31

32

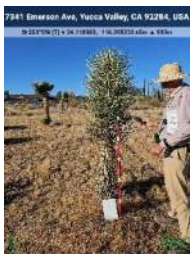
33



34

35

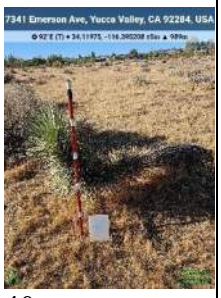
36



37

38

39

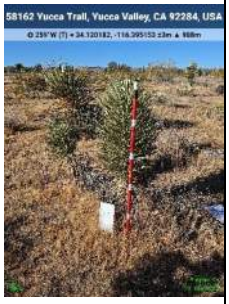


40

41

42

43



44

45

46

47

48

49

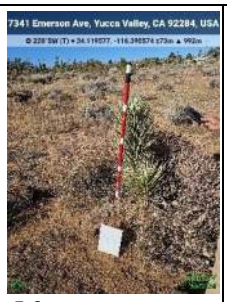

50

51

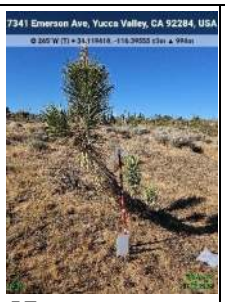
52

53


54



56



57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

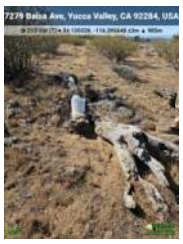
74

75

76

77

78


79


80


81


82


83


84


85


86


87


88


89


90


91


92


93


94

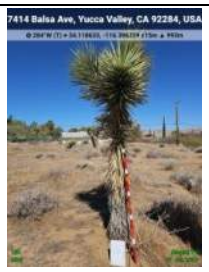

95


96


97


98


99


100


101

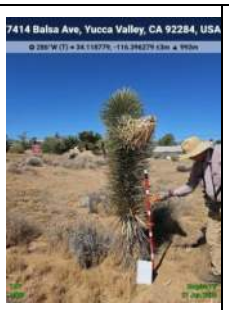

102


103

104

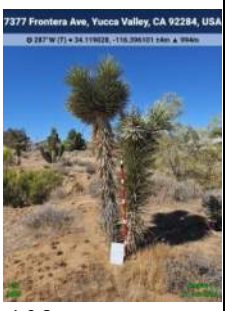
105

106



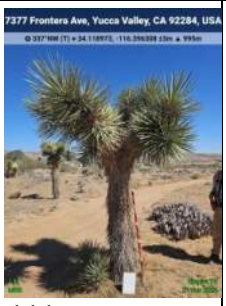
107

108



109

110



111

112

113

114

115

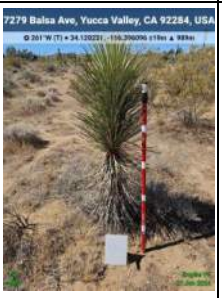
116

117

118


119

120



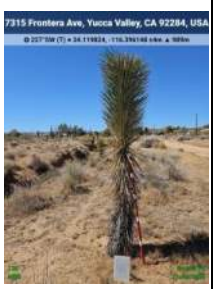
121

122

123

124

125



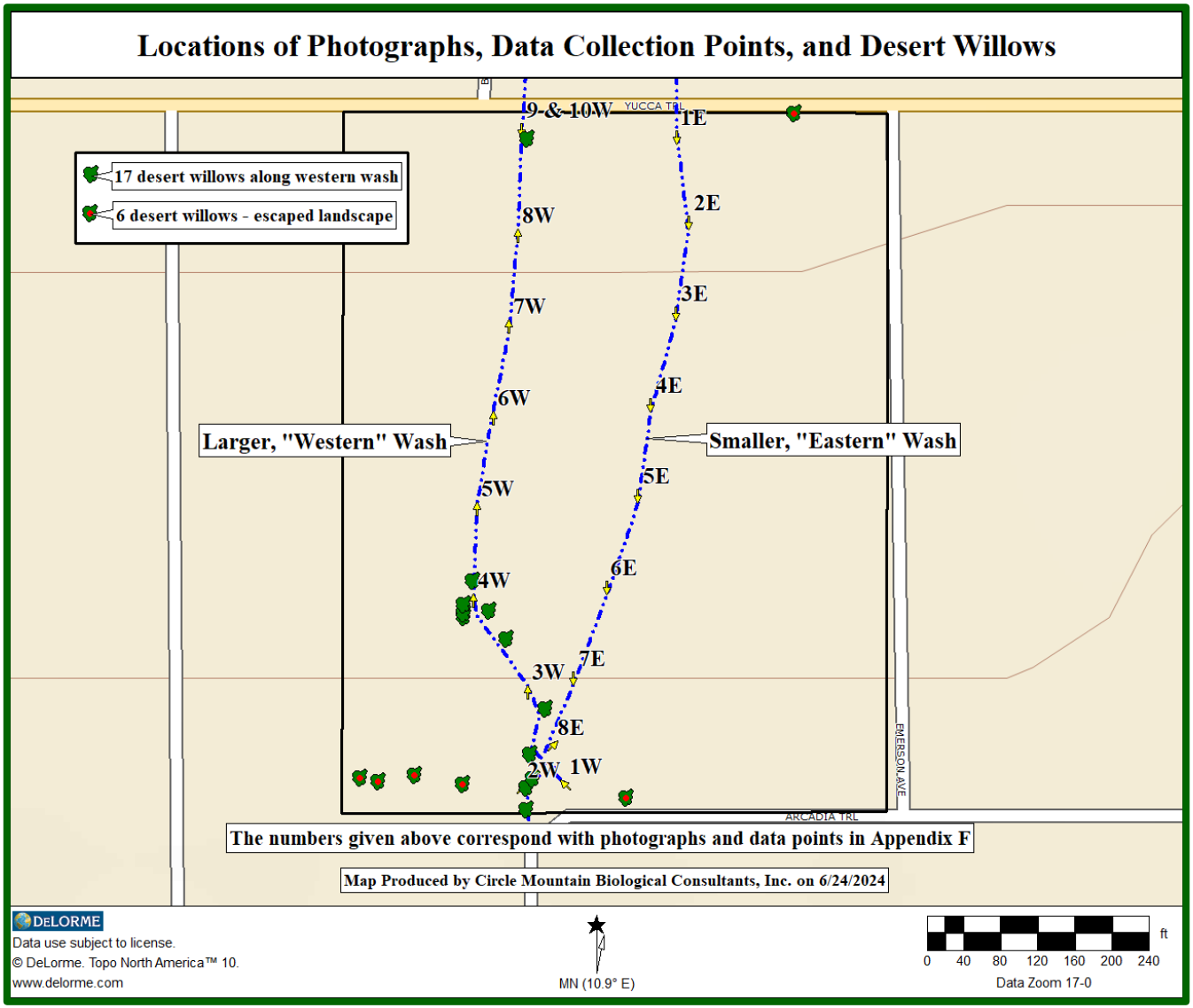
126

127

128

 129	 130	 131	 132	 133
 134	 135	 136	 137	 138
 139	 140	 141	 142	 143
 144	 145	 146		

Appendix F. Photographic Exhibits for Jurisdictional Waters Analysis



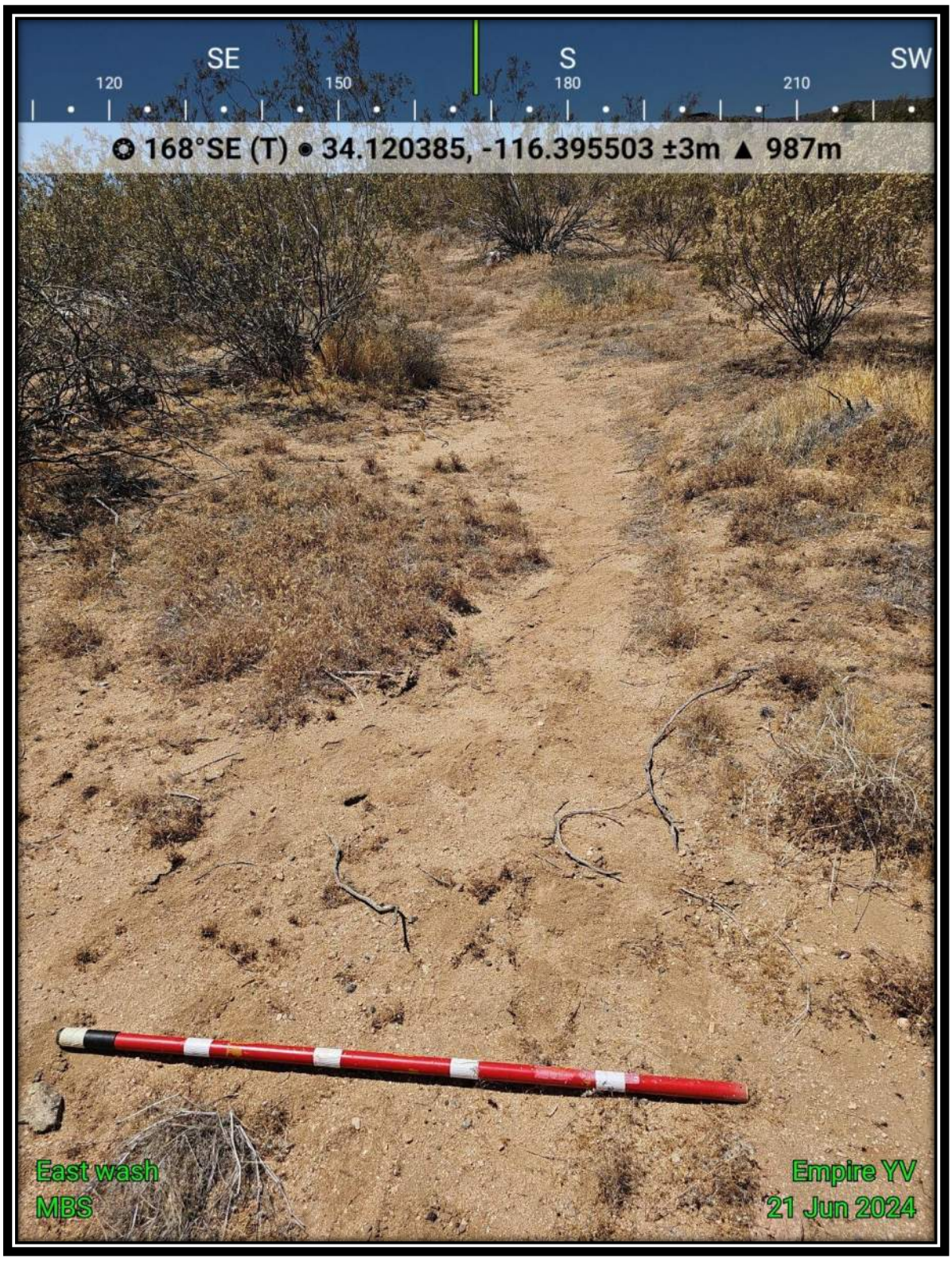


Exhibit 1E. View from the north boundary of the East Wash, facing southeast (see figure on previous page for locations and orientations of all photos).

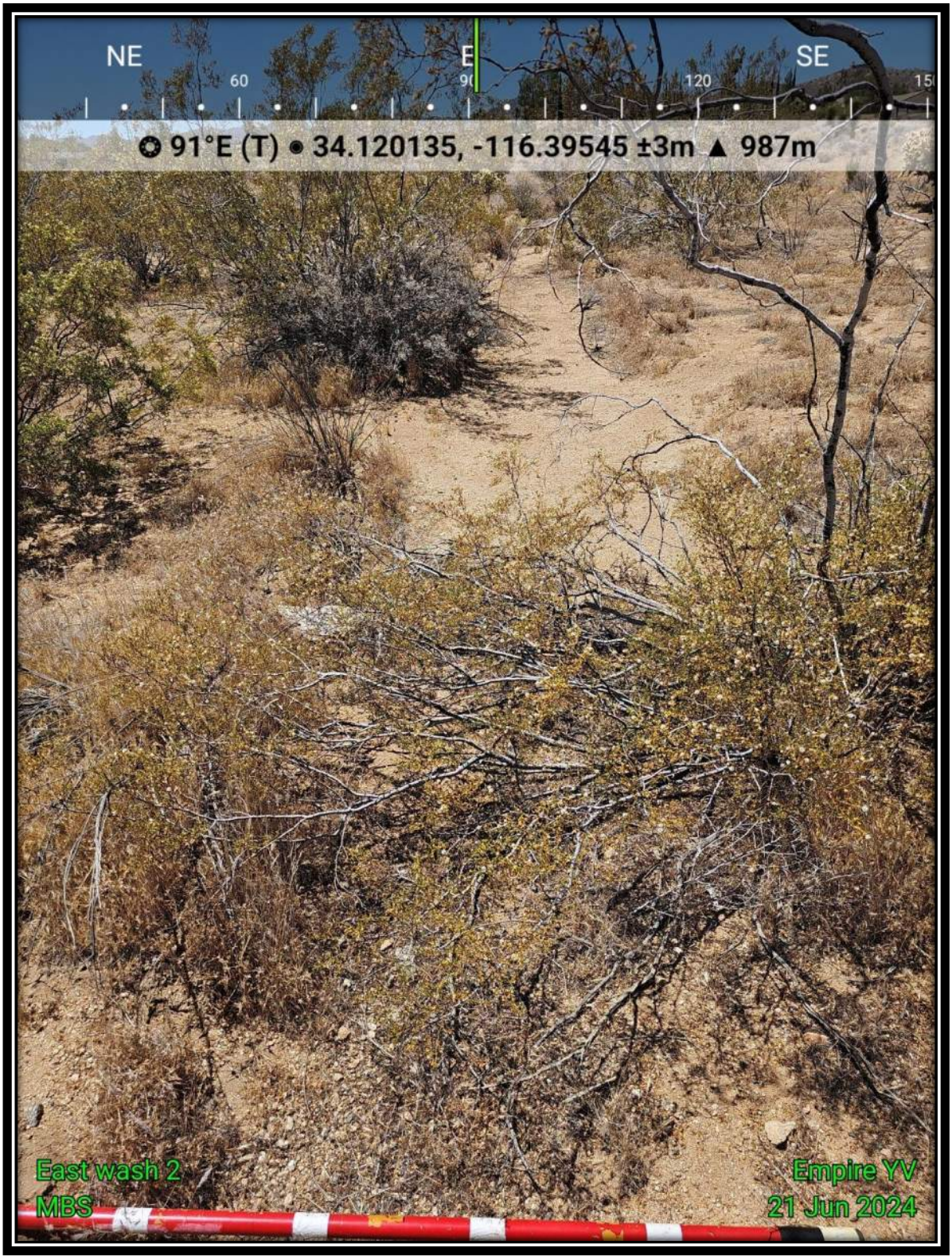


Exhibit 2E. View of the East Wash, facing east.

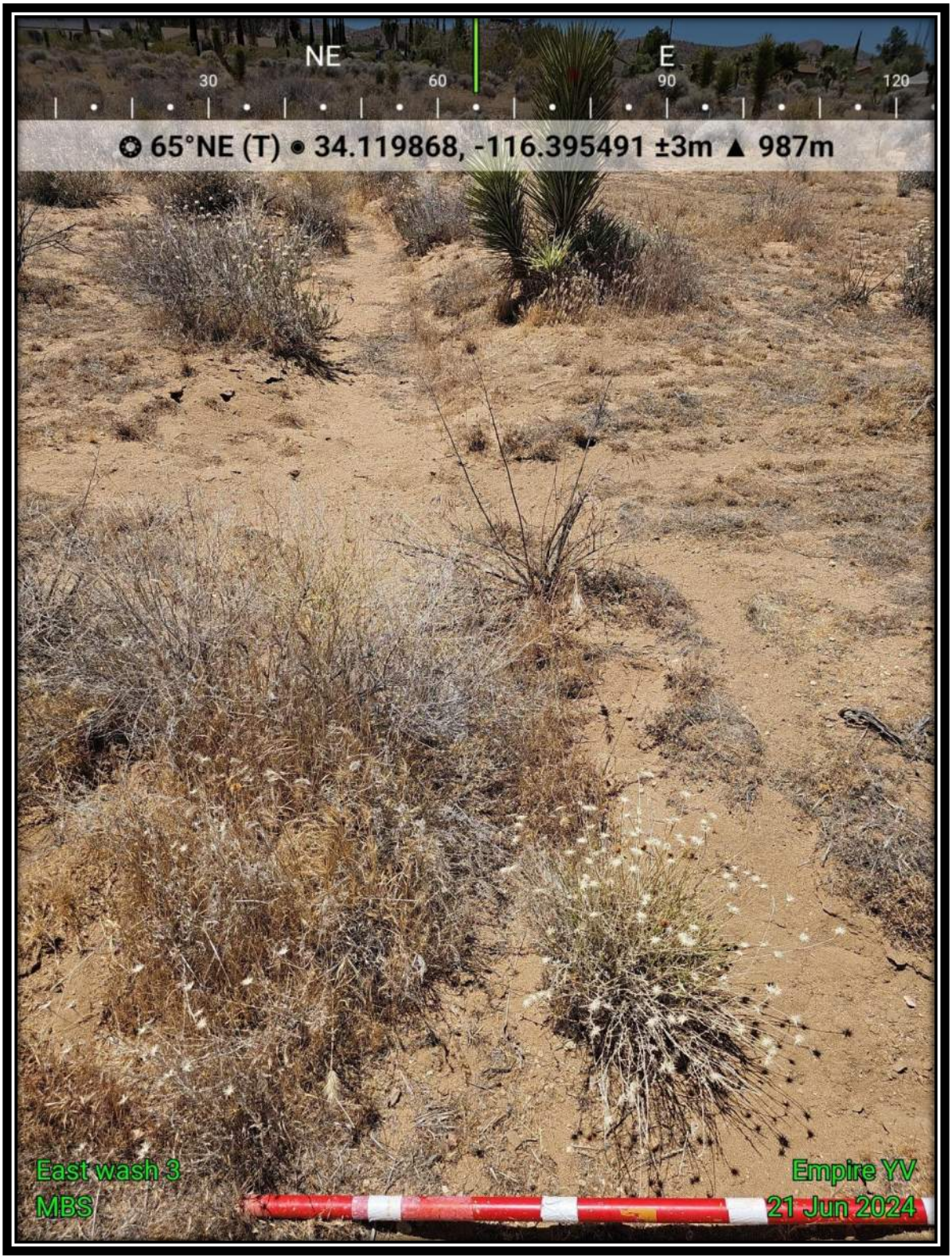


Exhibit 3E. View of the East Wash, facing north east.

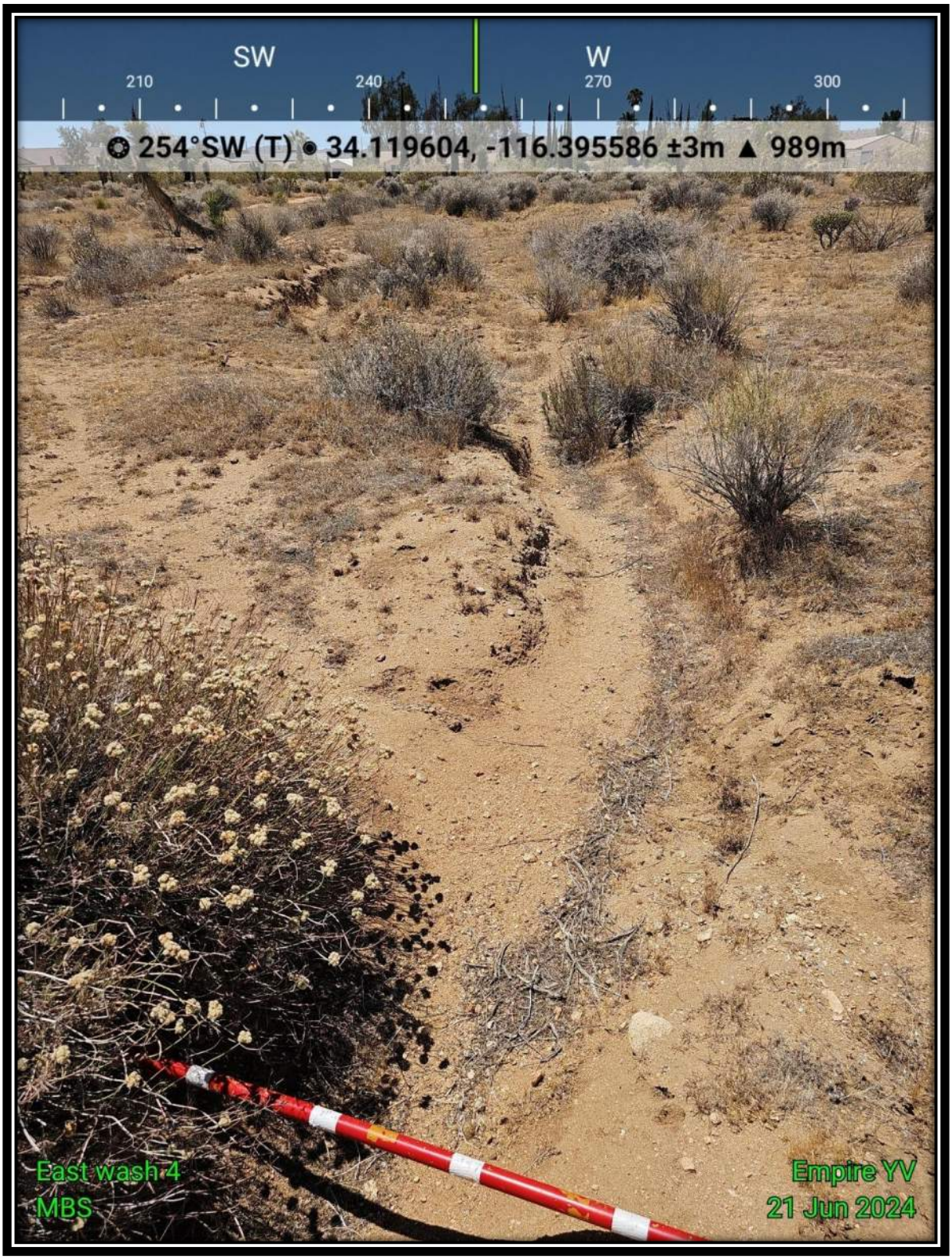


Exhibit 4E. View of the East Wash, facing southwest.

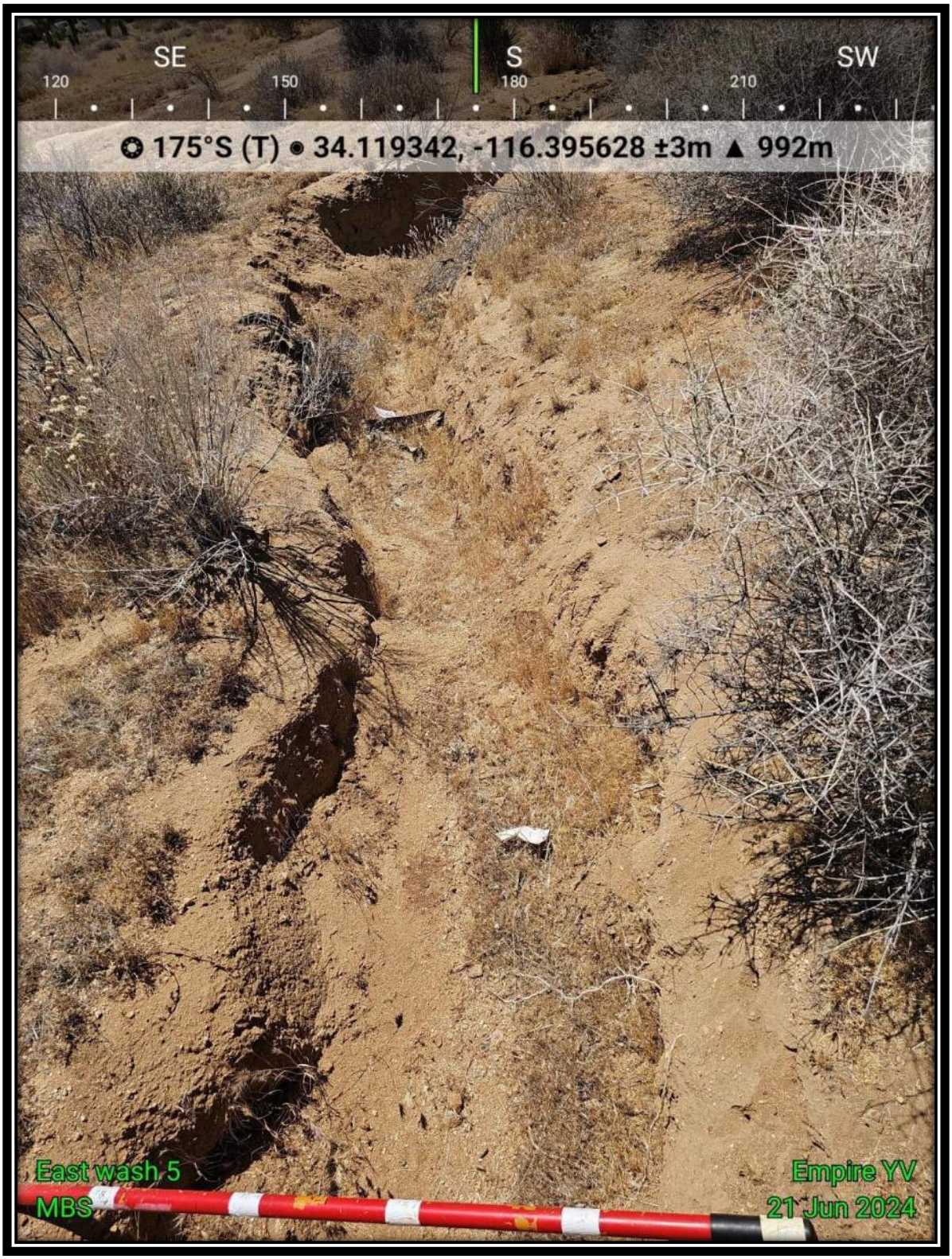


Exhibit 5E. View of the East Wash, facing south.

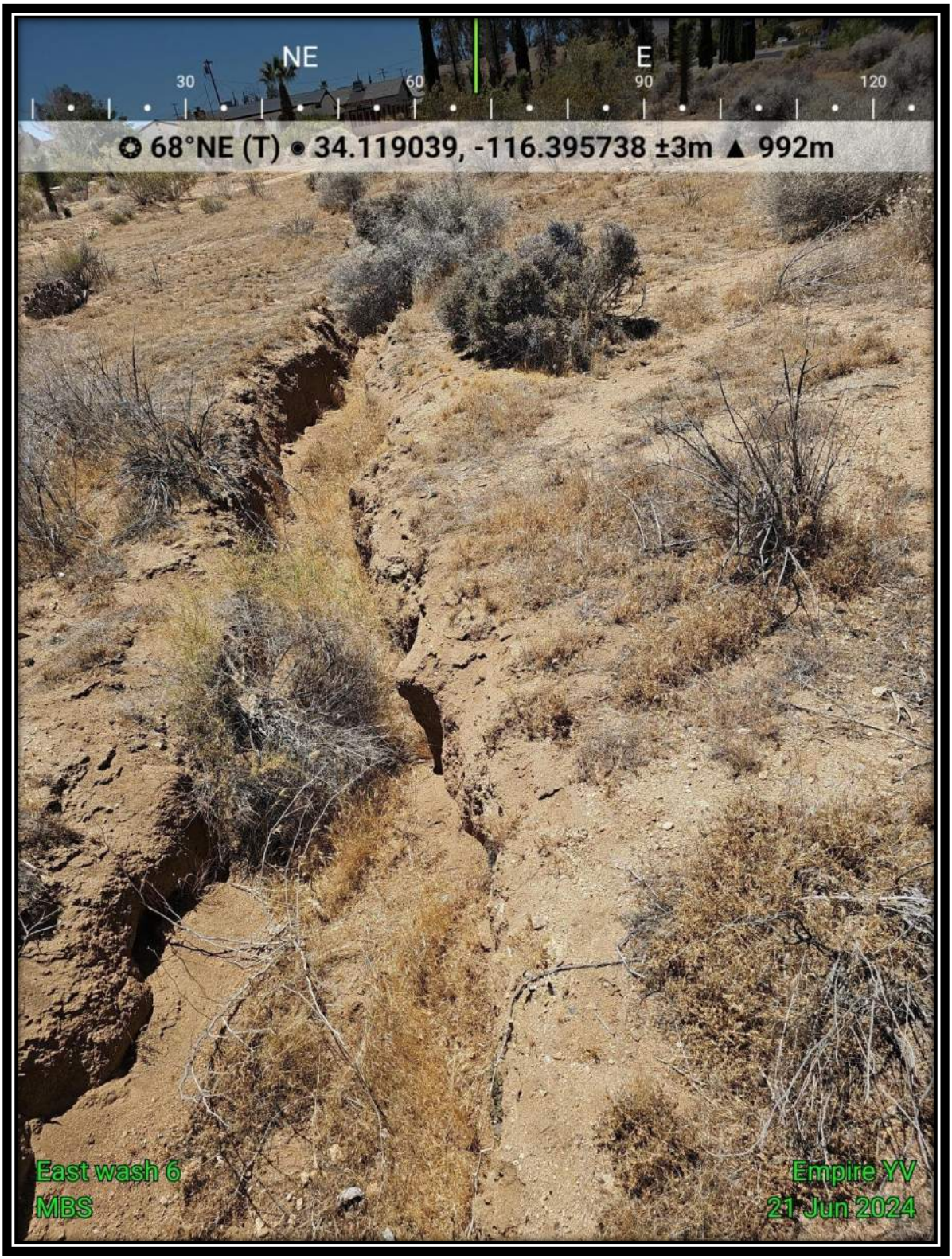


Exhibit 6E. View of the East Wash, facing northeast.

Exhibit 7E. View of the East Wash, facing southwest.

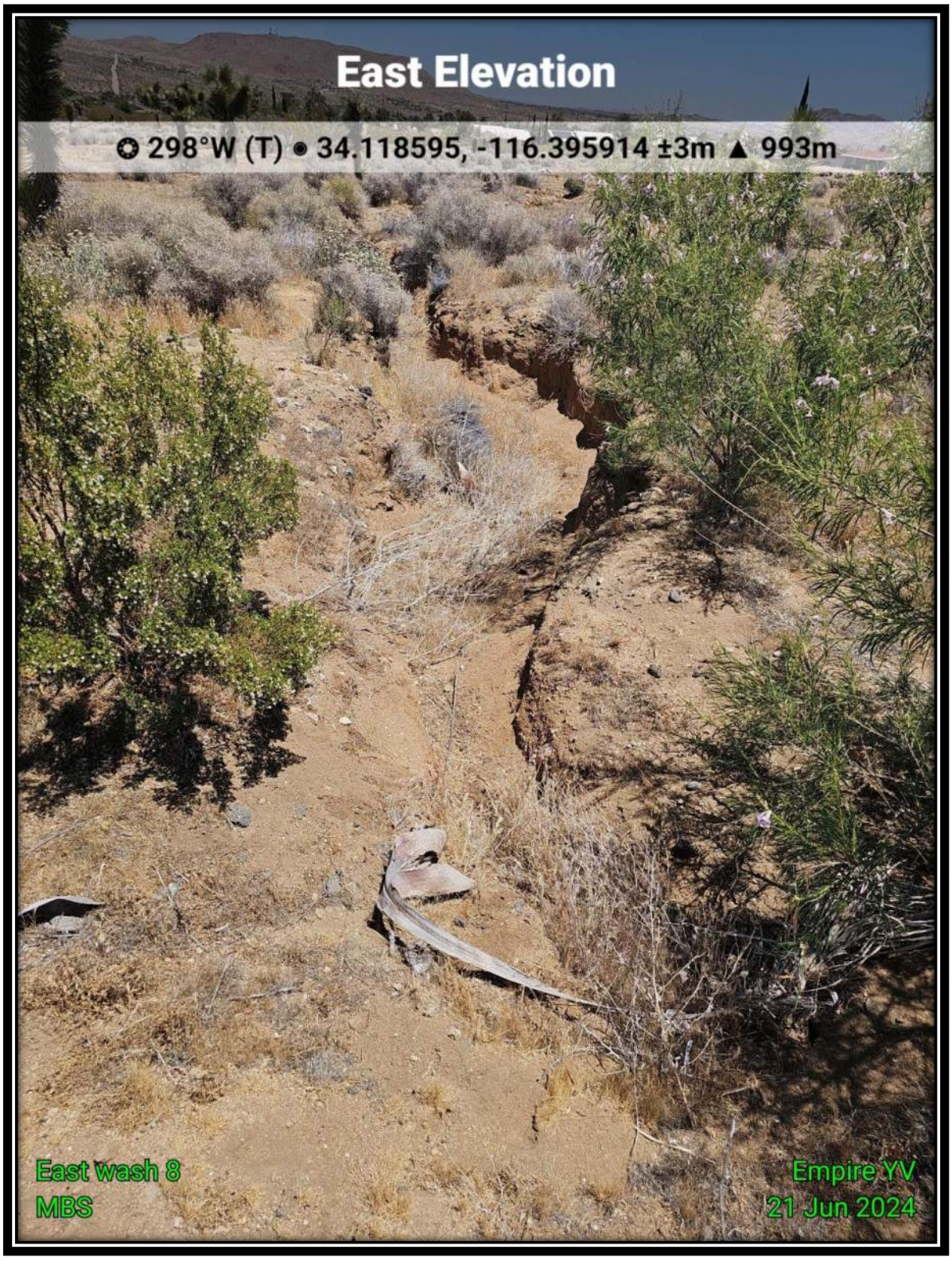


Exhibit 8E. View of the East Wash, facing west.

Exhibit 1W. View from the south boundary of the West Wash, east fork, facing north.

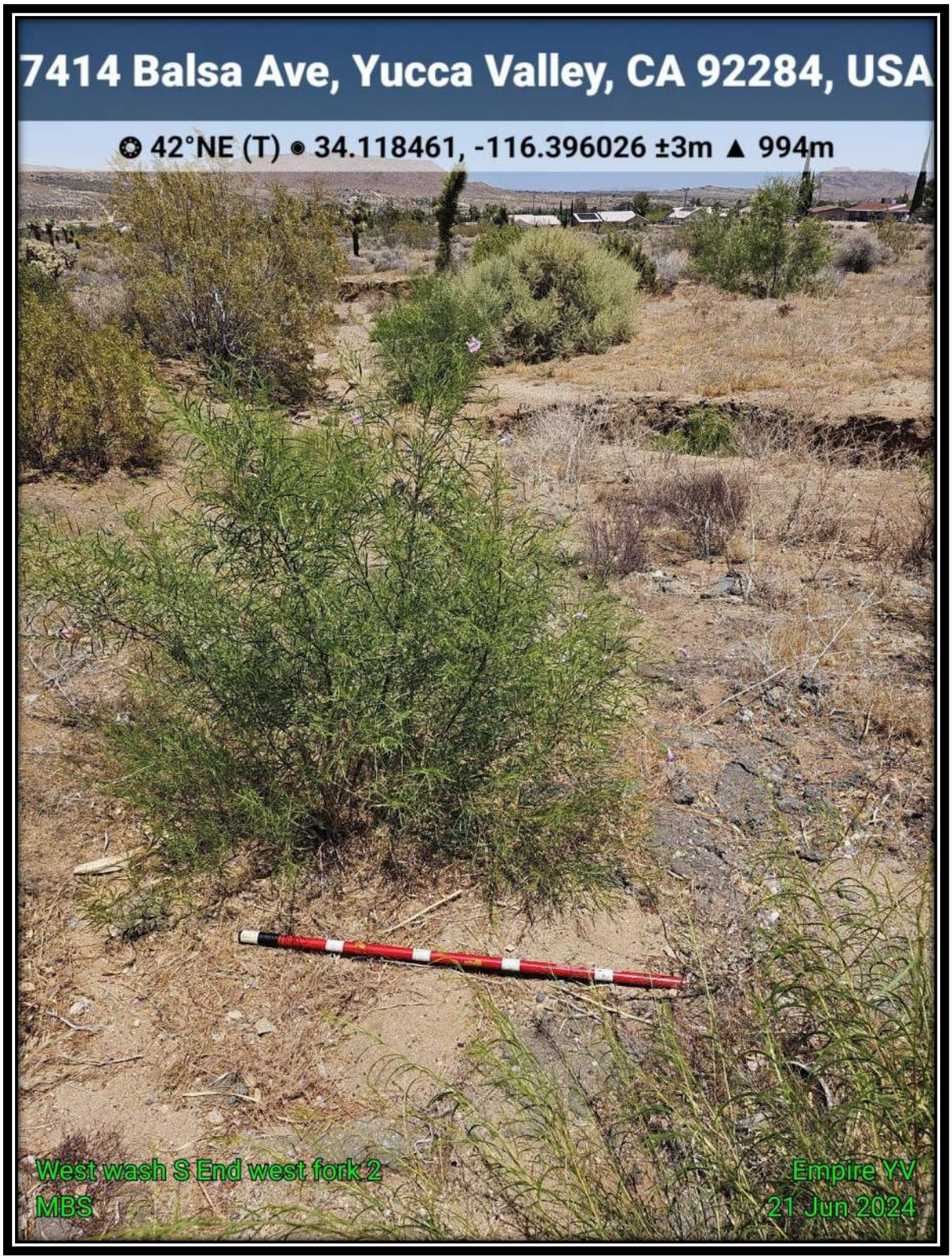


Exhibit 2W. View of the West Wash, west fork facing northeast.

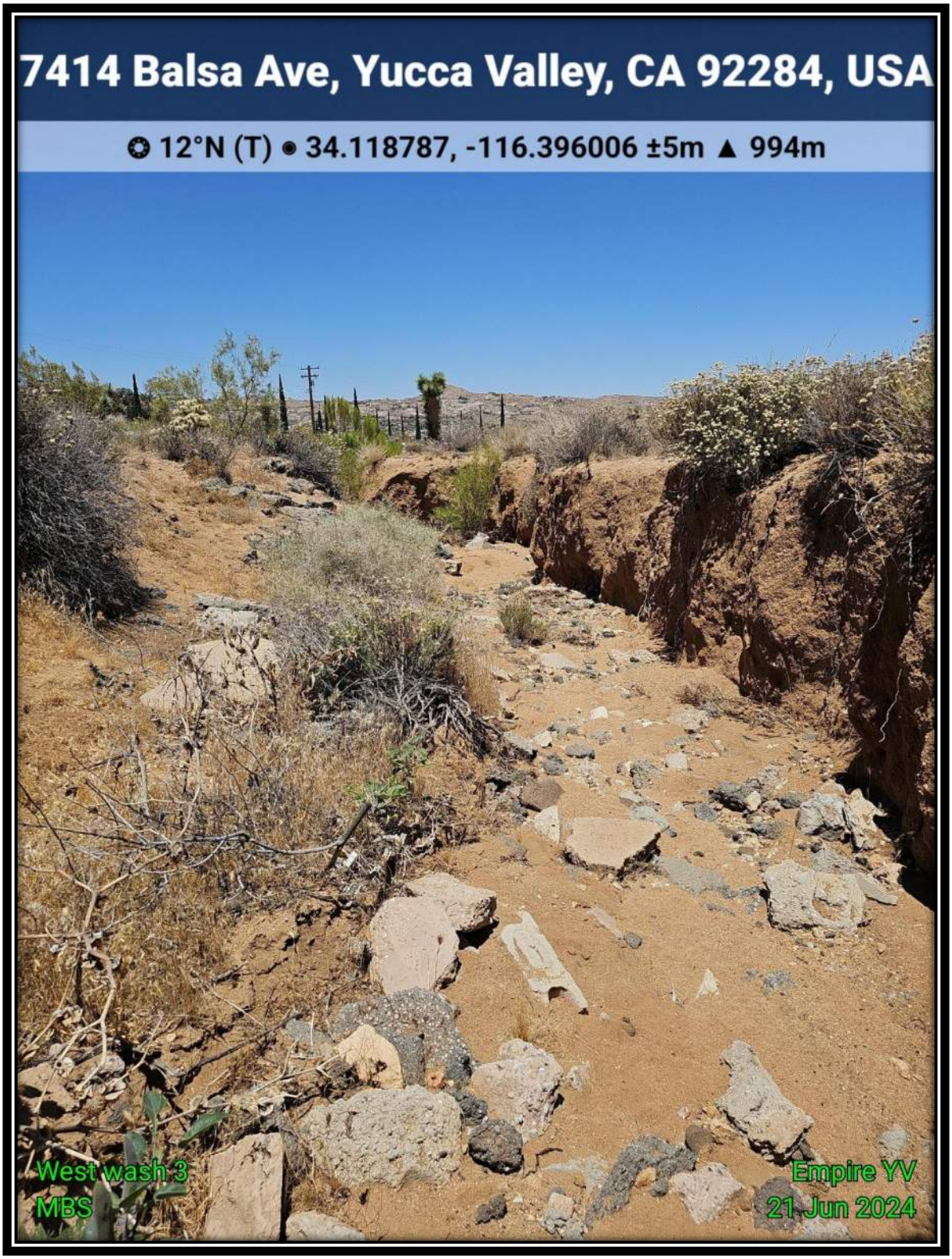


Exhibit 3W. View of the West Wash, facing north.

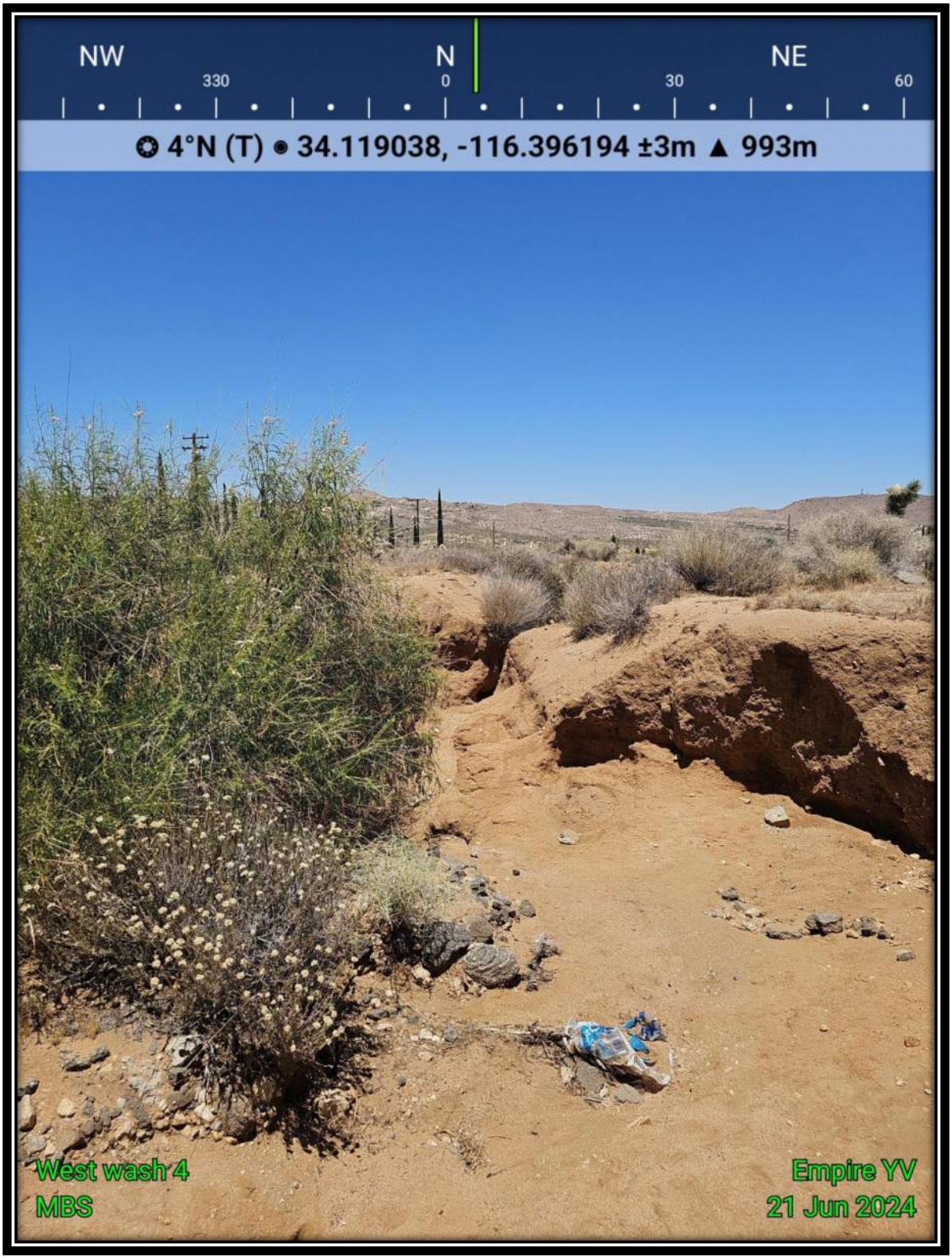


Exhibit 4W. View of the West Wash, facing north.

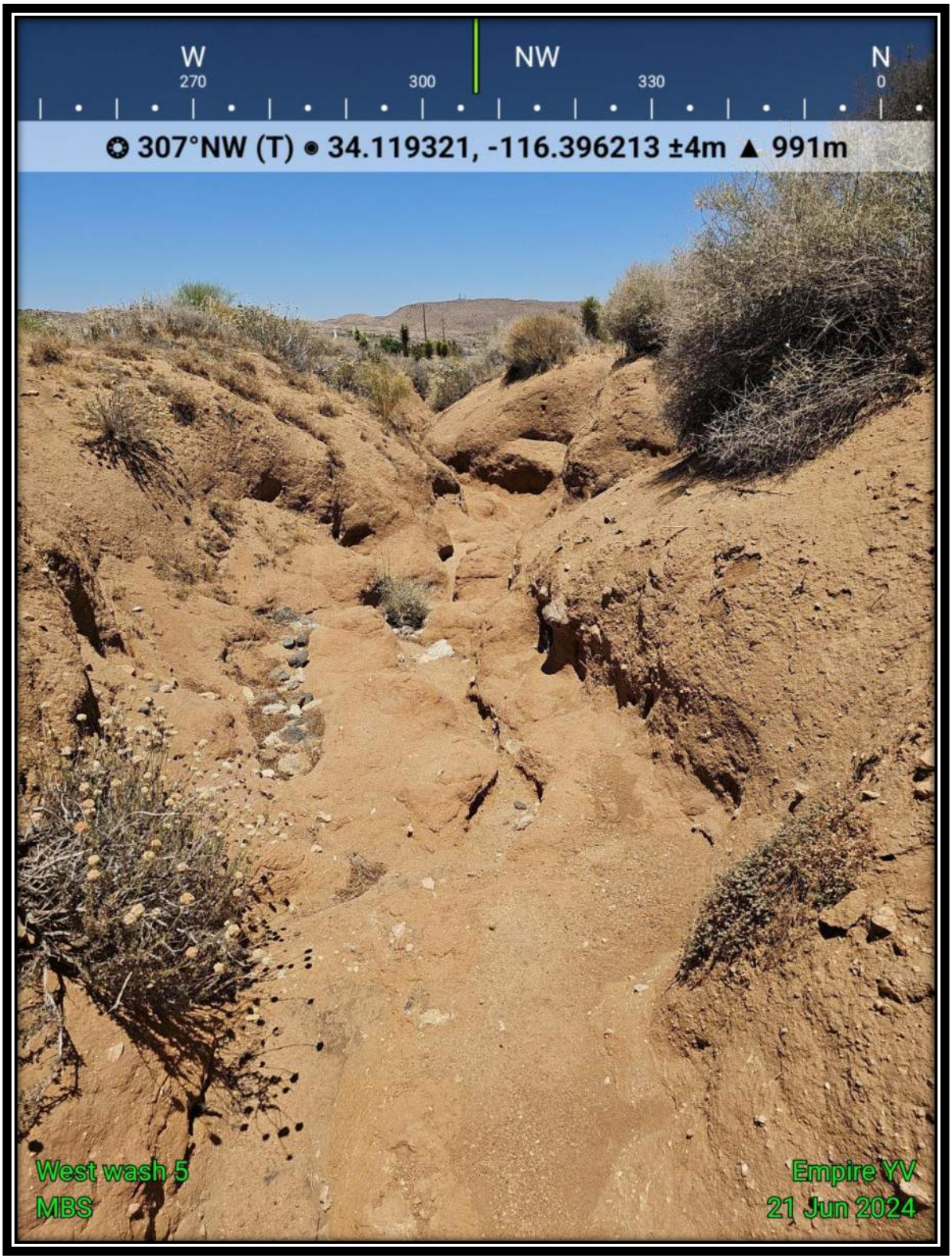


Exhibit 5W. View of the West Wash, facing north.

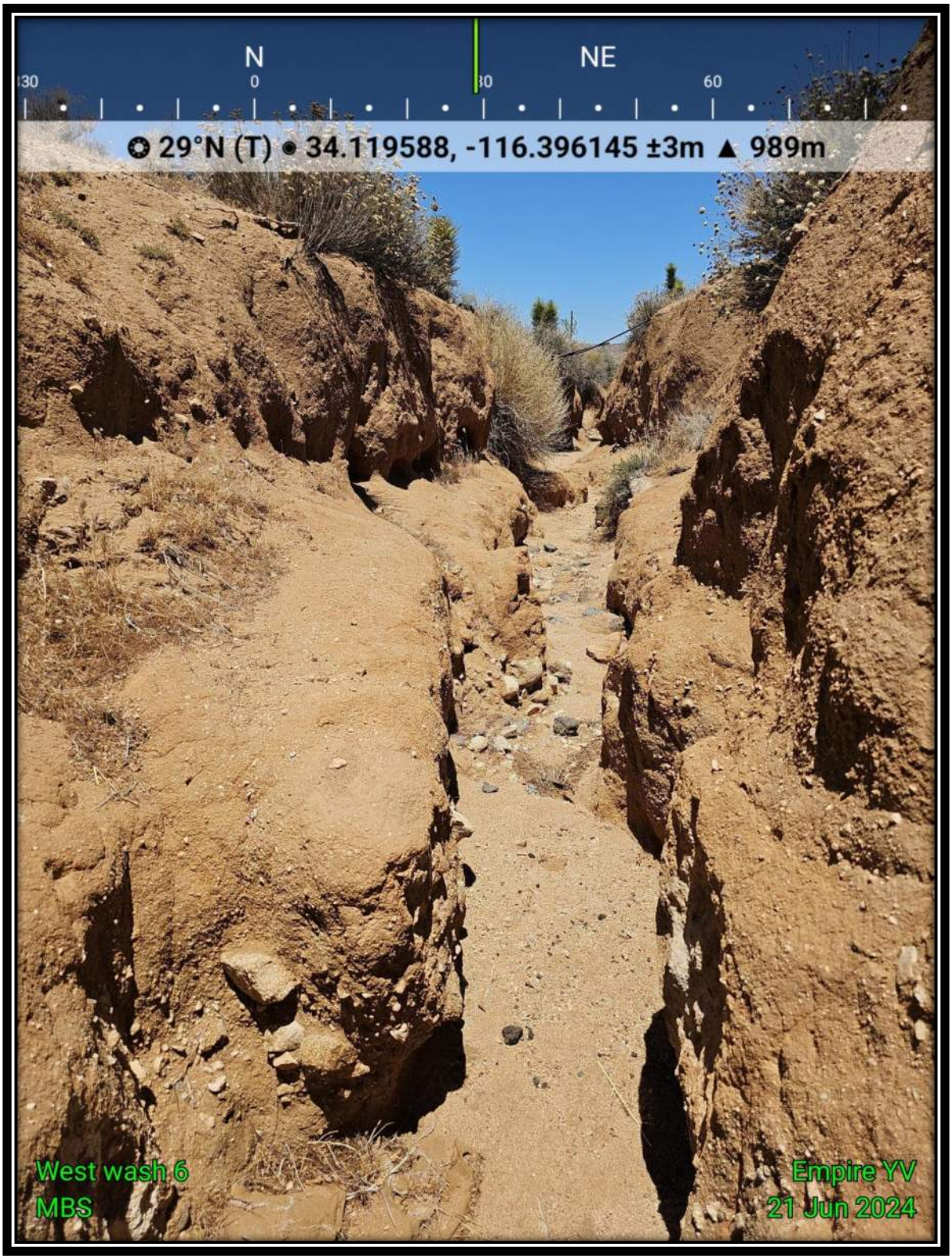


Exhibit 6W. View of the West Wash, facing north.

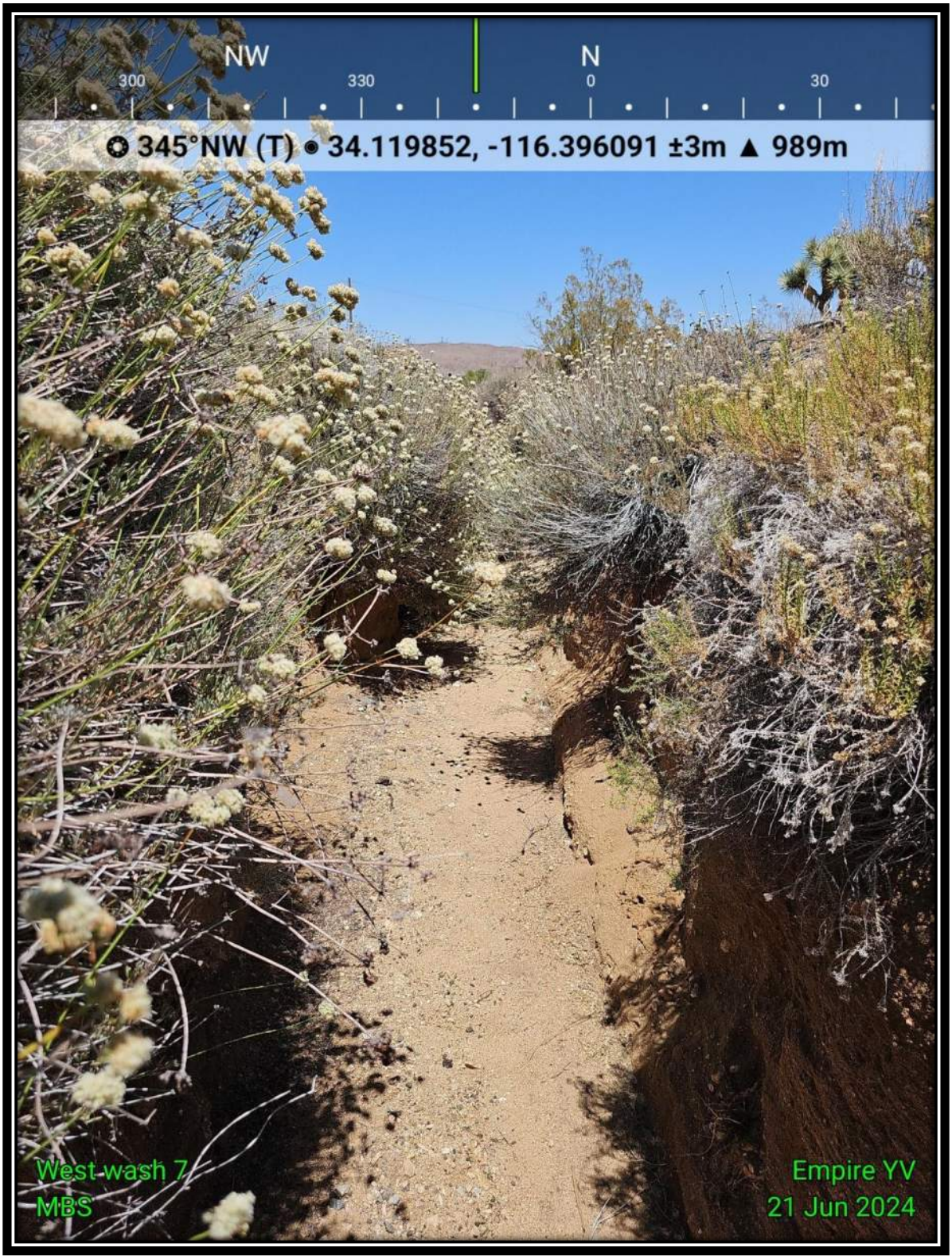


Exhibit 7W. View of the West Wash, facing north.

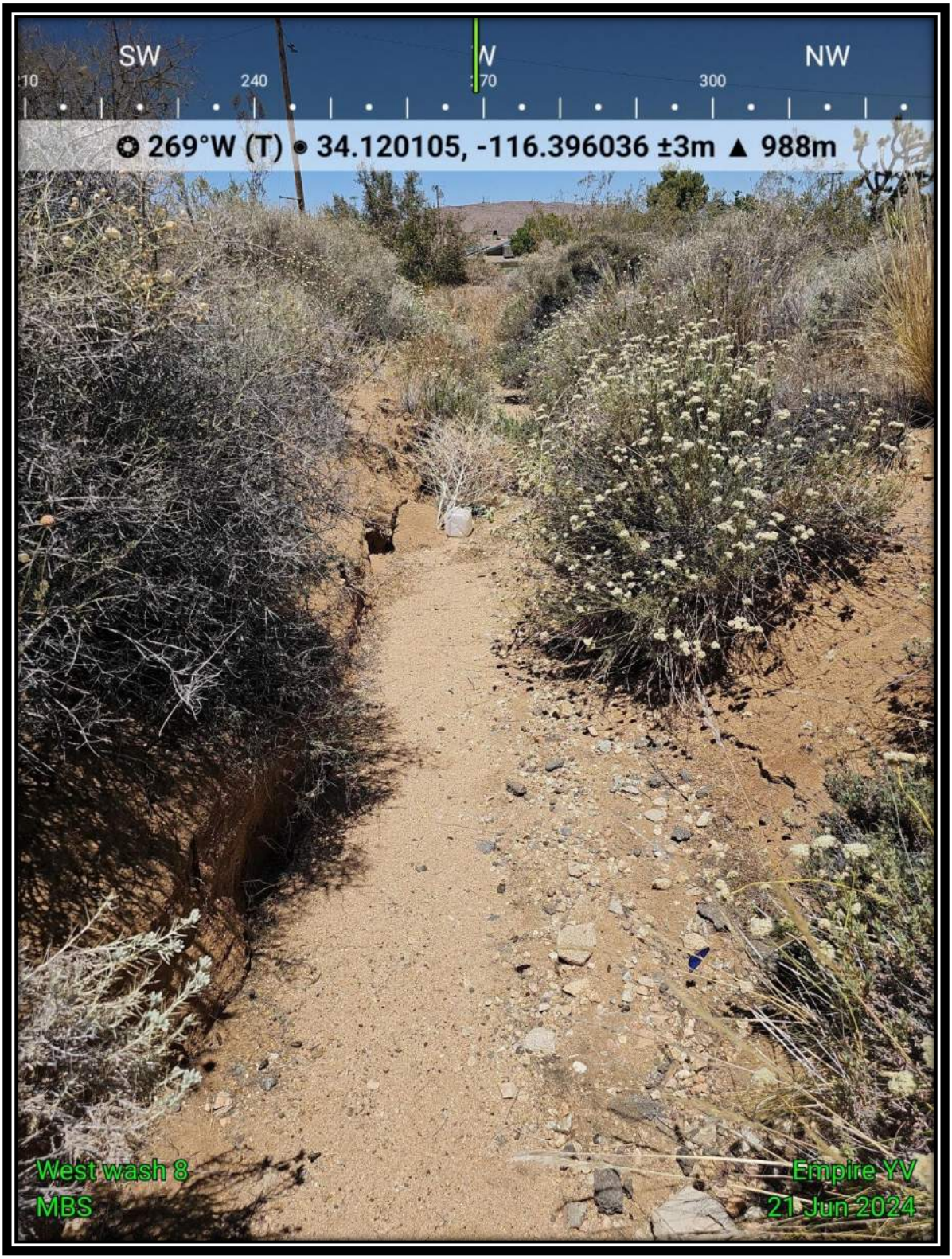


Exhibit 8W. View of the West Wash, facing north.

Exhibit 9W. View of the West Wash, facing north.

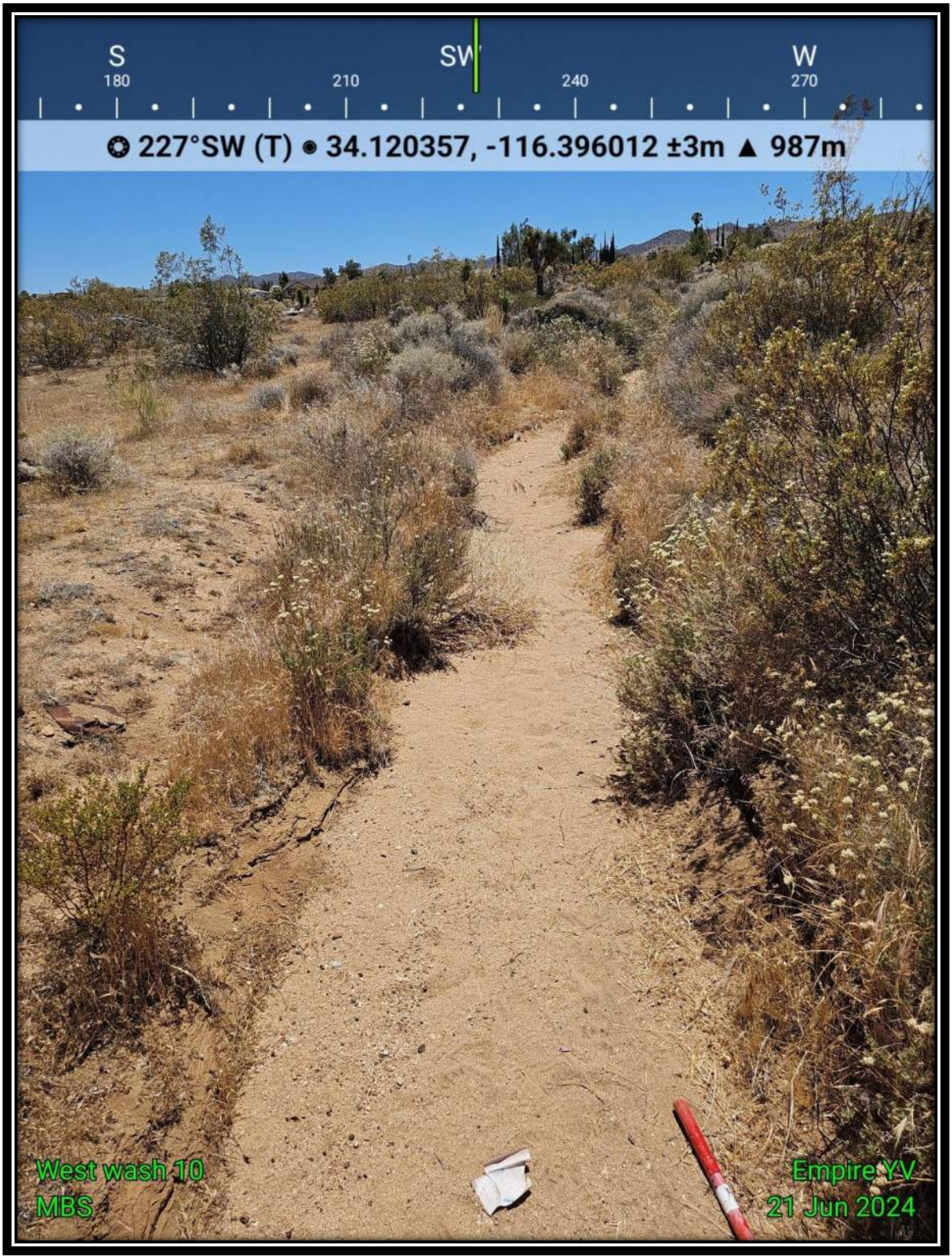


Exhibit 10W. View of the West Wash, facing south.