

**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.

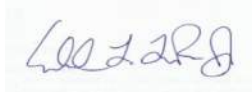
Oceano, California 93445

PH: (702) 328-5002

Email: fredbrilmanre@gmail.com

Contact: Fred Brillman

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

Figure 1. TT 17328: Vicinity Map

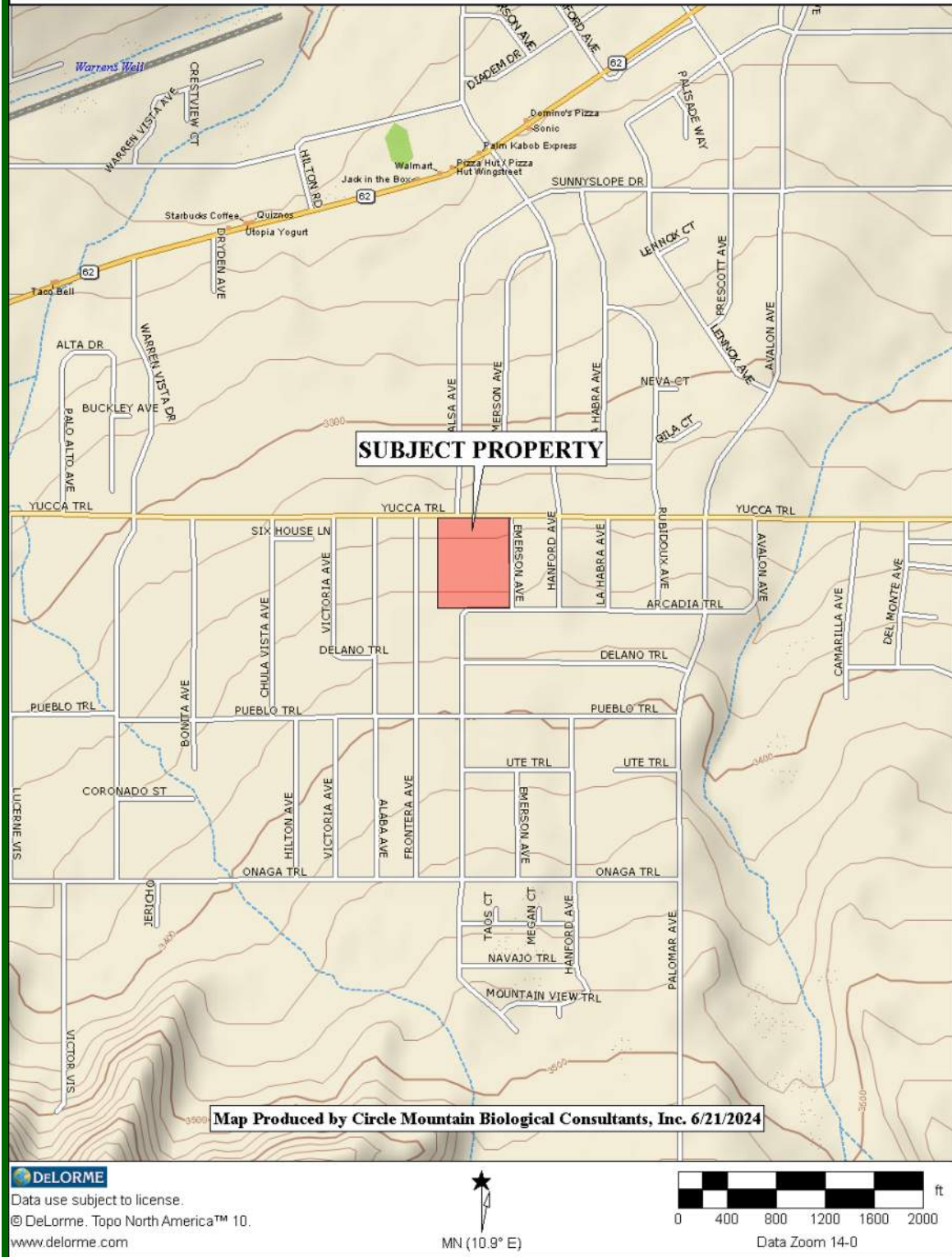


Figure 2. TT 17328: Site Map

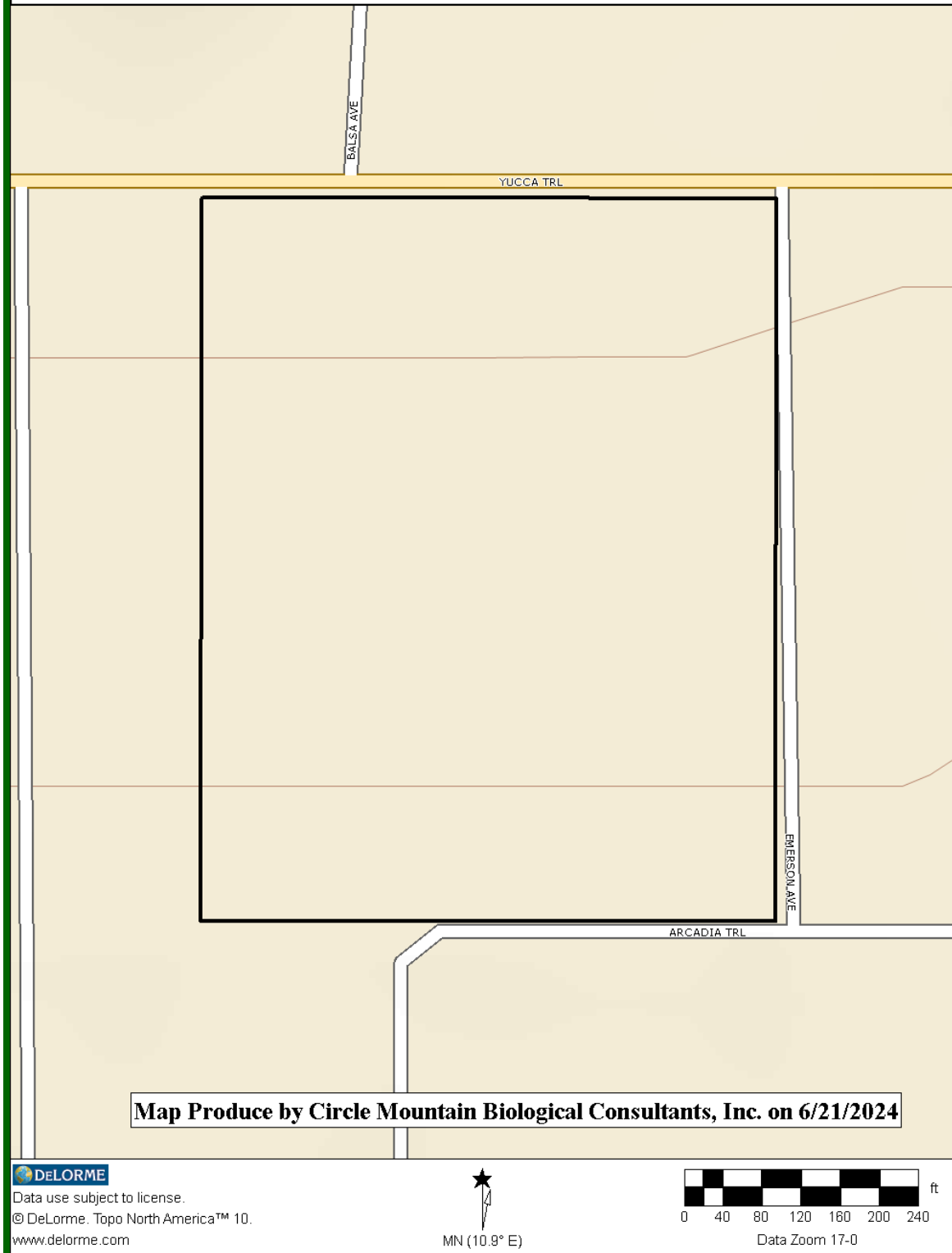
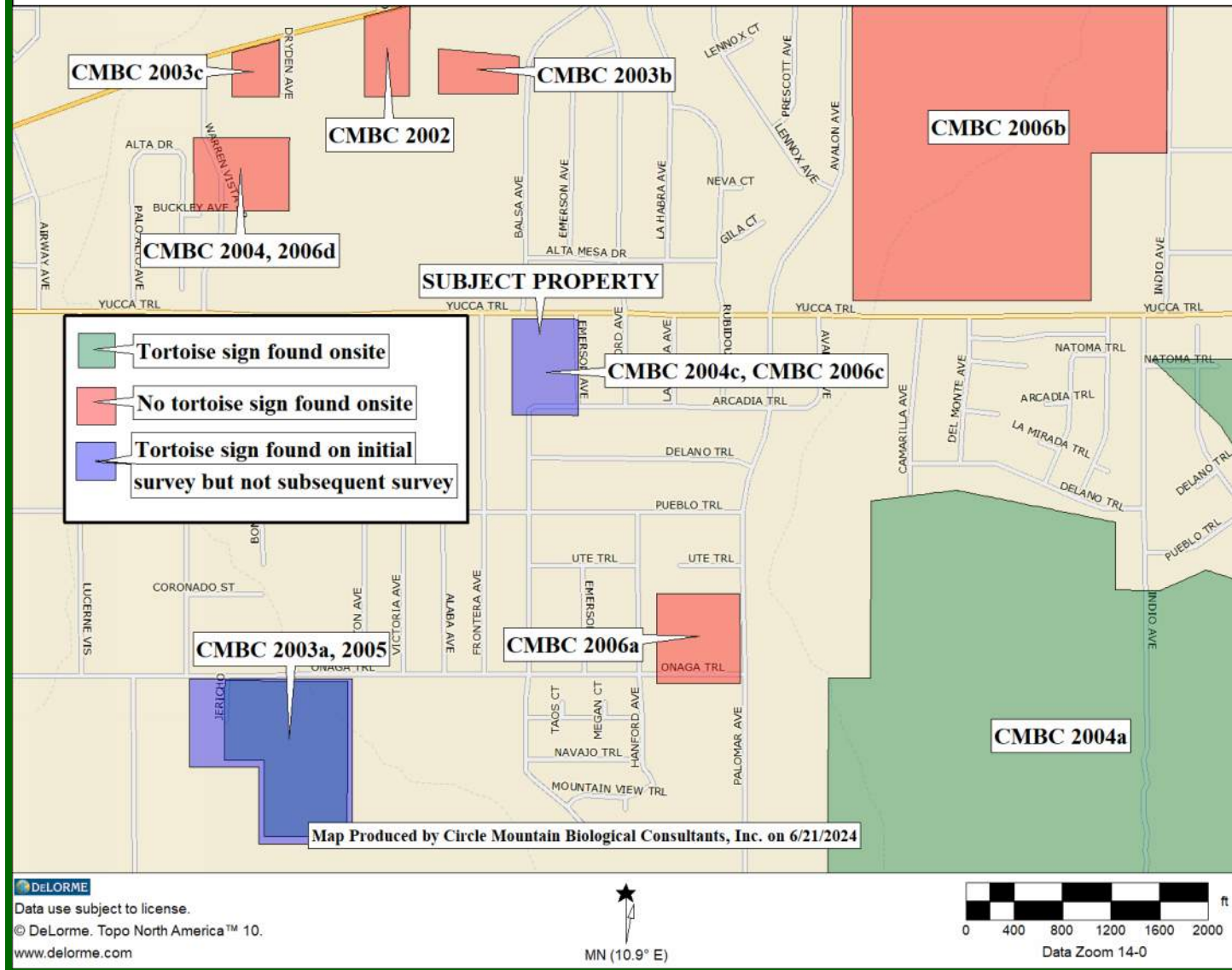
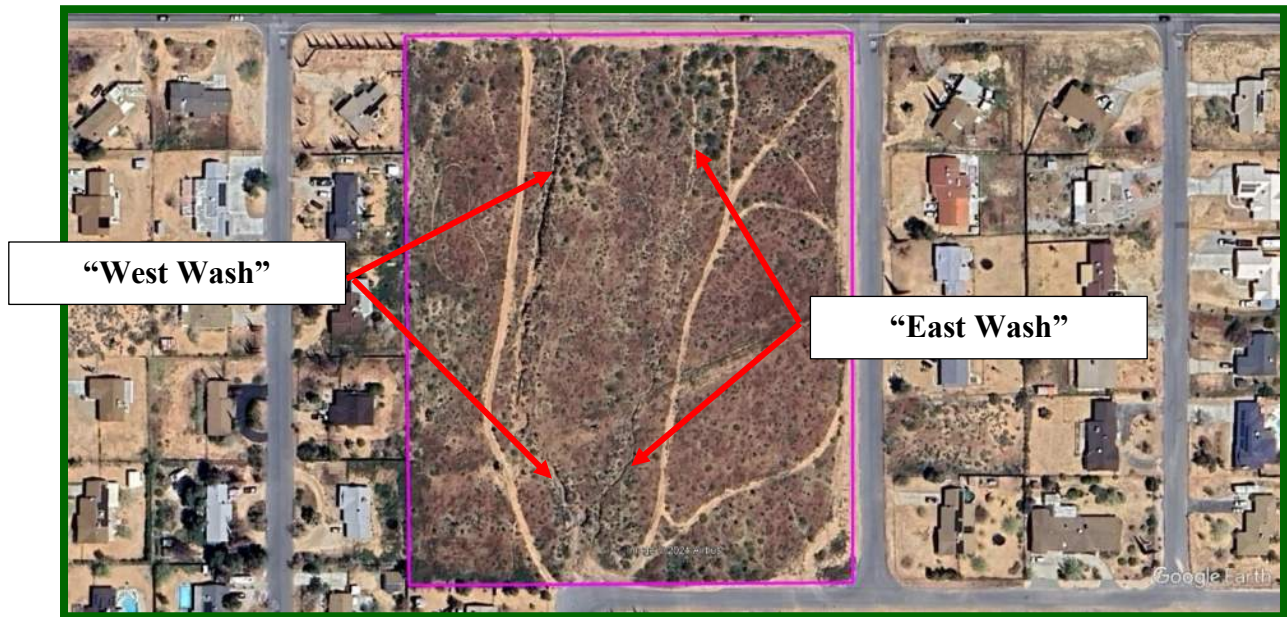


Figure 3. Results of 13 Tortoise Surveys in the Area between 2002 and 2024



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



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



Regional aerial view from approximately 11,000 feet altitude.

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.

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 blue line 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. As such, no impacts are anticipated, and no mitigation measures are recommended.

Based on the field survey and habitat assessment, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: desert tortoise, burrowing owl, desert kit fox, or American badger. As such, no adverse impacts have been identified and no mitigation measures are recommended.

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**Focused Survey for Agassiz's Desert Tortoise,
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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.

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 guidance¹ 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.

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

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.

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

3.0. Results

3.1. Common Biological Resources. The common plant and animal species identified during the survey are listed in Appendices A and B, respectively. Based on 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 their 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.

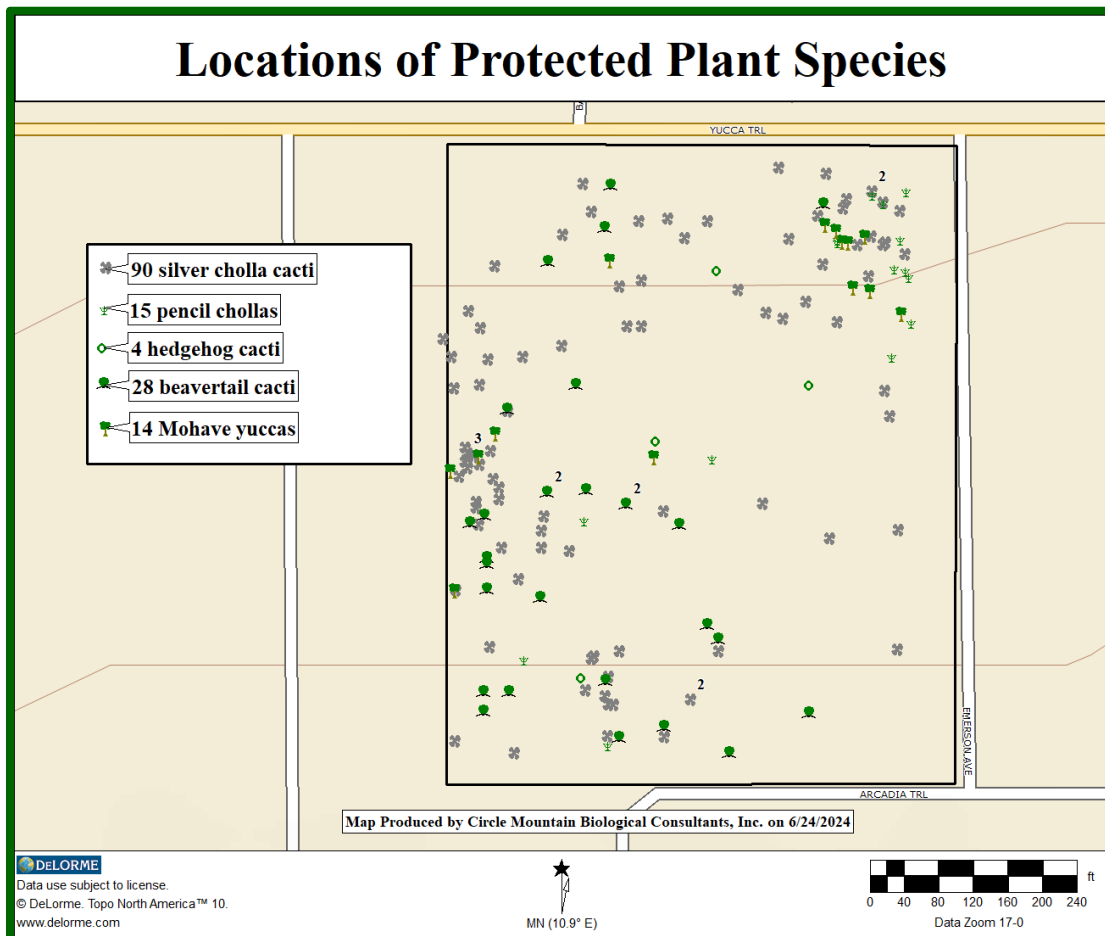
Regulated Desert Native Plants include (those that occur onsite are highlighted in red):

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

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

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

Joshua 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.

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. As such, if a tortoise is found on-site at the time of construction, all activities likely to affect that animal(s) should cease and the Town contacted to determine appropriate steps.

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

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

4.2. Impacts to Other Biological Resources and Proposed Mitigation.

4.2.1 *Other Special Status Species.* Based on the field survey and habitat assessment, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: 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 an/or nesting habitats are present include Cooper's hawk, LeConte's thrasher, and loggerhead shrike.

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.

Herein, 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. If CDFW determines that the development may substantially adversely affect fish and wildlife resources reliant on either of these water courses, a Streambed Alteration Agreement must be prepared. The Agreement includes reasonable conditions necessary to protect those resources and must comply with CEQA. The proponent may proceed with the activity in accordance with the final Agreement. The form is available at the footnote below². 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. The Town typically requires a Desert Native Plant Assessment to identify the numbers and locations of protected plants (provided herein) to be in compliance 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.

Given their current protected status, Joshua trees are a special case, requiring completion of an incidental take permit (ITP) before site development may proceed, which is outside the scope of this assessment. Appendix E provides all the baseline data and information needed to complete the ITP.

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

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

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

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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

Ephedraceae

Ephedra nevadensis

ANGIOSPERMAE: DICOTYLEDONES

Asteraceae

Adenophyllum cooperi

Ambrosia acanthicarpa

Ambrosia dumosa

Ambrosia salsola

Baccharis emoryi

Baileya sp.

Bebbia juncea

Ericameria cooperi var. *cooperi*

**Lactuca serriola*

Lepidospartum squamatum

Stephanomeria exigua

Tetradymia stenolepis

Bignoniaceae

Chilopsis linearis ssp. *arcuata*

Boraginaceae

Amsinckia tessellata

Brassicaceae

**Brassica tournefortii*

**Descurainia sophia*

**Sisymbrium altissimum*

**Sisymbrium irio*

Cactaceae

Cylindropuntia echinocarpa

Cylindropuntia ramosissima

Echinocereus engelmannii

Opuntia basilaris

Chenopodiaceae

Atriplex canescens

Atriplex polycarpa

**Salsola tragus*

GNETAE

Joint-fir family

Nevada joint-fir

DICOT FLOWERING PLANTS

Sunflower family

Adenophyllum

Annual bur-sage

Burrobush

Cheesebush

Emory baccharis

Marigold

Sweetbush

Cooper's goldenbush

Wild lettuce

Scale-broom

Milk aster

Mohave horsebrush

Bigonia family

Desert willow (PPS)

Borage family

Fiddleneck

Mustard family

Saharan mustard

Flixweed

Tumble mustard

London rocket

Cactus family

Silver cholla (PPS)

Pencil cholla (PPS)

Hedgehog cactus (PPS)

Beavertail cactus (PPS)

Goosefoot family

Four-winged saltbush

Allscale

Russian thistle

Cucurbitaceae*Cucurbita palmata***Gourd family**

Coyote gourd

Euphorbiaceae*Croton californicus**Euphorbia polycarpa***Spurge family**

Croton

Sandmat

Fabaceae*Hoffmannseggia microphylla* (*Caesalpinia virgata*)*Parkinsonia aculeata***Pea family**

Caesalpinia

Mexican palo verde

Geraneaceae**Erodium cicutarium***Geranium family**

Red-stemmed filaree

Krameriaceae*Krameria (grayi) bicolor**Krameria erecta***Krameria family**

White rhatany

Pima rhatany

Lamiaceae*Salvia columbariae**Sambucus nigra* ssp. *caerulea* (*Salazaria mexicana*)**Mint family**

Chia

Paper-bag bush

Malvaceae*Sphaeralcea ambigua***Mallow family**

Desert mallow

Nyctaginaceae*Allionia incarnata***Four o'clock family**

Trailing windmills

Polemoniaceae*Eriastrum* c.f. *sapphirinum***Phlox family**

Woolly star

Polygonaceae*Eriogonum* c.f. *davidsonii**Eriogonum fasciculatum**Eriogonum nidularium***Buckwheat family**

Davidson buckwheat

California buckwheat

Whiskbroom

Rosaceae*Coleogyne ramosissima***Rose family**

Blackbush

Solanaceae*Datura wrightii**Lycium andersonii**Lycium cooperi***Nightshade family**

Jimsonweed

Anderson's box-thorn

Peach thorn

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)

Poaceae

**Bromus diandrus*
**Bromus madritensis* ssp. *rubens*
**Bromus tectorum*
**Bromus (trinii) berterioanus*
**Hordeum murinum*
Pleuraphis rigida
**Schismus* sp.
Stipa (Achnatherum) speciosa

Grass family

Common ripgut-grass
Red brome
Cheat grass
Chilean grass
Hare barley
Big galleta
Split-grass
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 (1999), 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

Sceloporus magister

Uta stansburiana

Teiidae

Cnemidophorus tigris

AVES

Columbidae

Columba livia

Streptopelia decaocto

Zenaida macroura

Trochilidae

Calypte costae

Tyrannidae

Sayornis saya

Myiarchus cinerascens

Corvidae

Corvus corax

Remizidae

Auriparus flavipes

Troglodytidae

Campylorhynchus brunneicapillus

Mimidae

Mimus polyglottos

Emberizidae

Amphispiza bilineata

Fringillidae

Carpodacus mexicanus

REPTILES

Iguanids

Desert spiny lizard

Common side-blotched lizard

Whiptails

Western whiptail

BIRDS

Pigeons and doves

Rock dove

Eurasian collared-dove

Mourning dove

Hummingbirds

Costa's hummingbird

Tyrant flycatchers

Say's phoebe

Ash-throated flycatcher

Crows and jays

Common raven

Verdins

Verdin

Wrens

Cactus wren

Mockingbirds and thrashers

Northern mockingbird

Sparrows, warblers, tanagers

Black-throated sparrow

Finches

House finch

Passeridae*Passer domesticus*

MAMMALIA

Leporidae*Lepus californicus**Sylvilagus audubonii***Sciuridae***Ammospermophilus leucurus**Otospermophilus Beecheyi***Heteromyidae***Dipodomys* sp.**Felidae***Lynx rufus***Weavers**

House sparrow

MAMMALS

Hares and rabbits

Black-tailed hare

Audubon cottontail

Squirrels

Antelope ground squirrel

California ground squirrels

Pocket mice

Kangaroo rat

Cats

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 Survey biologist(s): Ed LaRue, Susan Sciville
(month, day, year)

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

County: SB Quad: Yuma Valley Location: 11S 35S810 3775450
(UTM coordinates, lat-long, and/or TRS; map datum)

Transect #: 15 Transect length: 0.1 mi Type of survey: 10-acre
(acres to be surveyed; ~~100% coverage~~ probabilistic sampling)

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

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

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

Live Tortoises

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

Tortoise Sign (burrows¹, scats, carcasses, etc)

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

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

December 20094-24

2024 Field Season Page 1 of 1

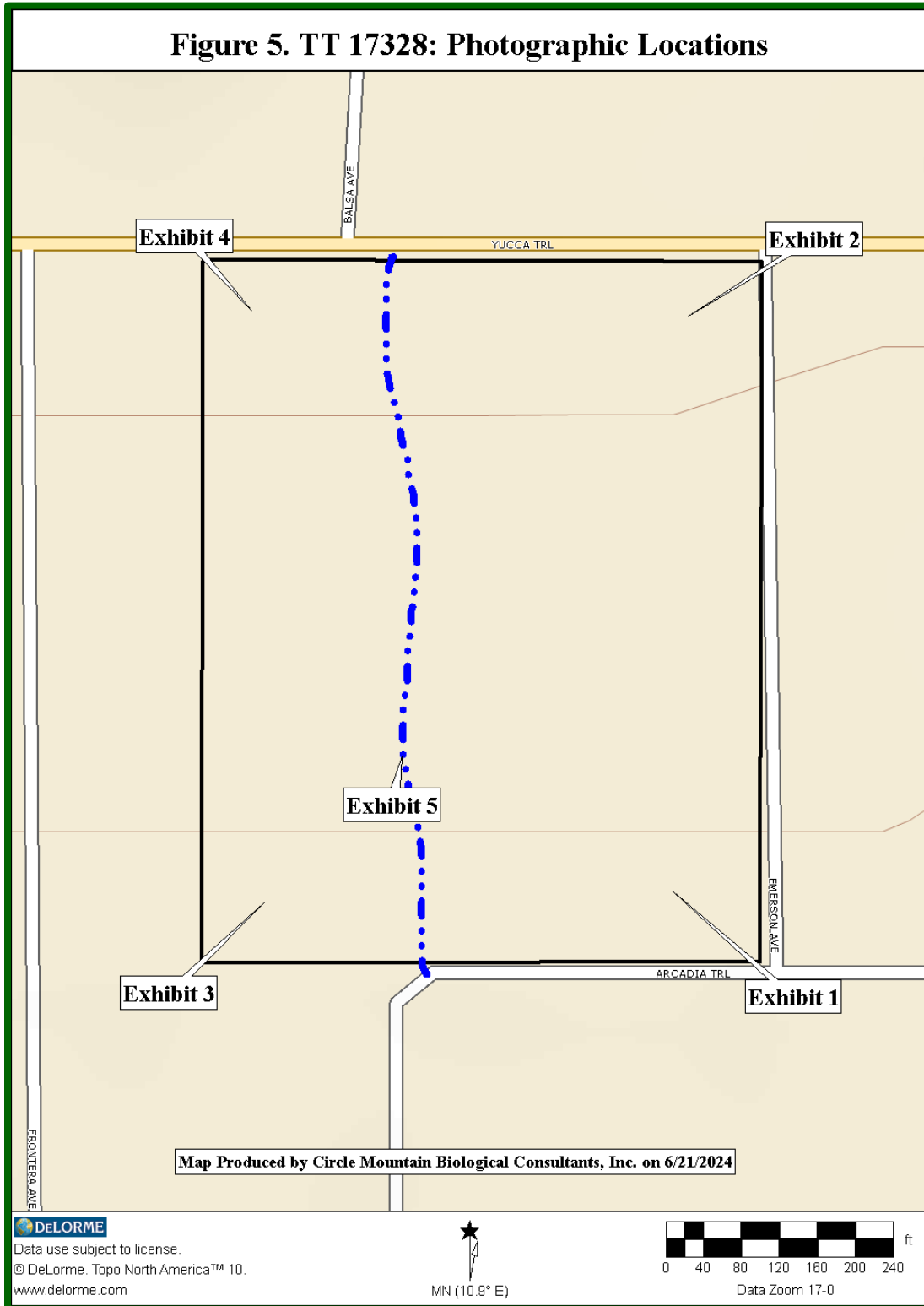
| | | | | | |
|--|-----------------|------------------------------------|--|--------------------------------------|---------------------------------|
| JOB #/NAME Empire YV | DATE 6/21/24 | DRIVE TIME TO FROM 0330 1330 | MILES 133 144 | FIELD TIME BEGIN END 0530 1130 | SURVEYORS Elakue Z Seille |
| WEATHER CONDITIONS (Start/End) TEMP: 64°F WIND X: Calm NSEW CLOUD: 0% | | | UTM (NAD 83) (circle starting corner) NE→ NW→ SE→ N SW→ | | |
| TEMP: 92°F WIND X: 216 NSEW CLOUD: 0% | | | 58130 563710 555810 563710 567275 567475 3775450 545350 | | |

| PERENNIAL PLANTS | | ANNUAL PLANTS | | BIRDS | HERP | MAM |
|------------------|---------|---------------|----------|----------|-------------|---------|
| Lar Tri | Dart Wh | Amba | Bro Pja | CoaA | DESP | CAES |
| Amba | Bro Cal | Bro Gr | Har Mar | MAPD | 3P WATA | AUCD |
| Aph Na | Am Pol | Bro Red | La Ser | 13P MOFI | SRU | KRET |
| Git Fas | Achge | Bro Tr | Bro Tri | RODD | | BHA |
| Sal Ma | Beh In | Exp Ko | Er Mid | BTSP | | Reb Cal |
| Amba | Am Can | Sen Gr | Bei (Pe) | VERO | | AEOS |
| Col Ram | Abeloo | Bro Tr | Sta Tr | SAPH | | |
| Spe Amb | Lep Squ | Sis Aji | Sakol | EUCD | | |
| Kra Ere | Coel or | Dej Sat | | ENSP | Photographs | |
| Kabra | Bro Em | Amu Es | | COHU | SE → NW | |
| Plu Ric | Cyl Ech | Sis AH | | CAMP | 2 NE → SW | |
| Lyc Cal | Cyl Ram | En Sap | | ATPC | 3 SW → NE | |
| Tet Ser | Opu Bay | Sol Tr | | NOMD | 4 NW → SE | |
| Lyc And | En Eric | En (Daw) | | | | |
| Eric Co | Yue Bre | Cur Pal | | | | |
| Mar Ar | Yue Gr | All The | | | | |

| OBSERVABLE HUMAN DISTURBANCES | | | | | | | | | |
|-------------------------------|------|-------|--------|---------|------|------|-------|-------|--------|
| T# | East | North | OHV | Road/Tr | Dog | Dump | S Gun | Rifle | Target |
| 2 | 5800 | 5450 | | if | | if | | | |
| 4 | 5780 | 5870 | land → | if | mail | if | | | |
| 6 | 5760 | 5480 | | if | | if | | | |
| 8 | 5740 | 5670 | | if | | if | | | |
| 10 | 5720 | 5450 | | if | | if | | | |
| 12 | 5700 | 5670 | | if | | if | | | |
| 14 | 5680 | 5450 | | if | | if | | | |
| 16 | 5660 | 5670 | | if | | if | | | |
| 18 | 5640 | 5460 | | if | | if | | | |
| | | | | (6) | (19) | (2) | (28) | (1) | |

topography and soils: Flat, sandy loam

Appendix D. Photographic Exhibits



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 scalebroom 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

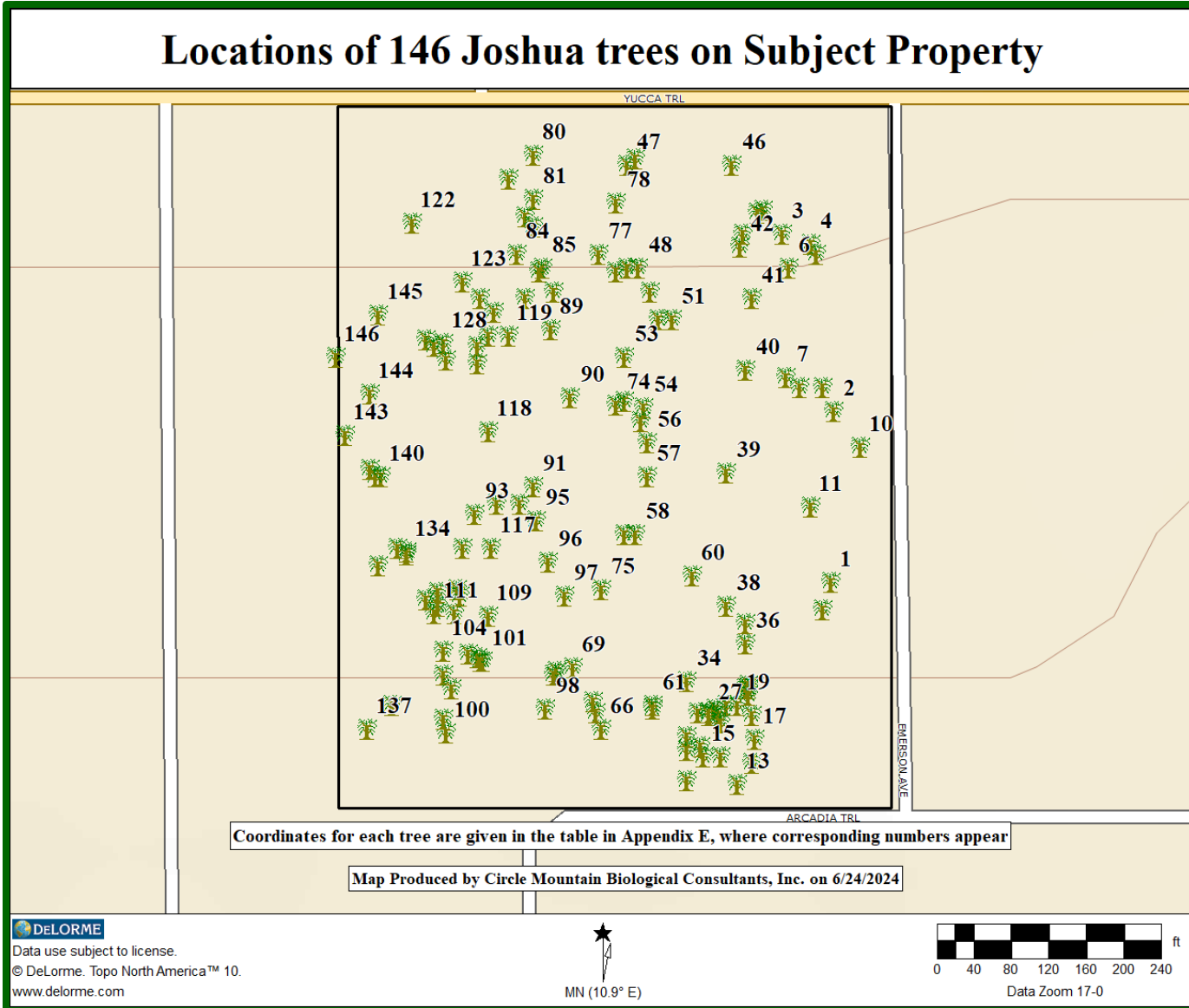
An evaluation of individual Joshua trees was conducted according to census instructions pertaining to the WJTCA [Fish and Game Code section 1927.3, subdivision (a)(1)] by Ed LaRue and Margaret Adam on February 27, 2024, between 08:30 and 1730. Global positioning system (GPS) coordinates were taken for 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: \geq 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



| 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 |

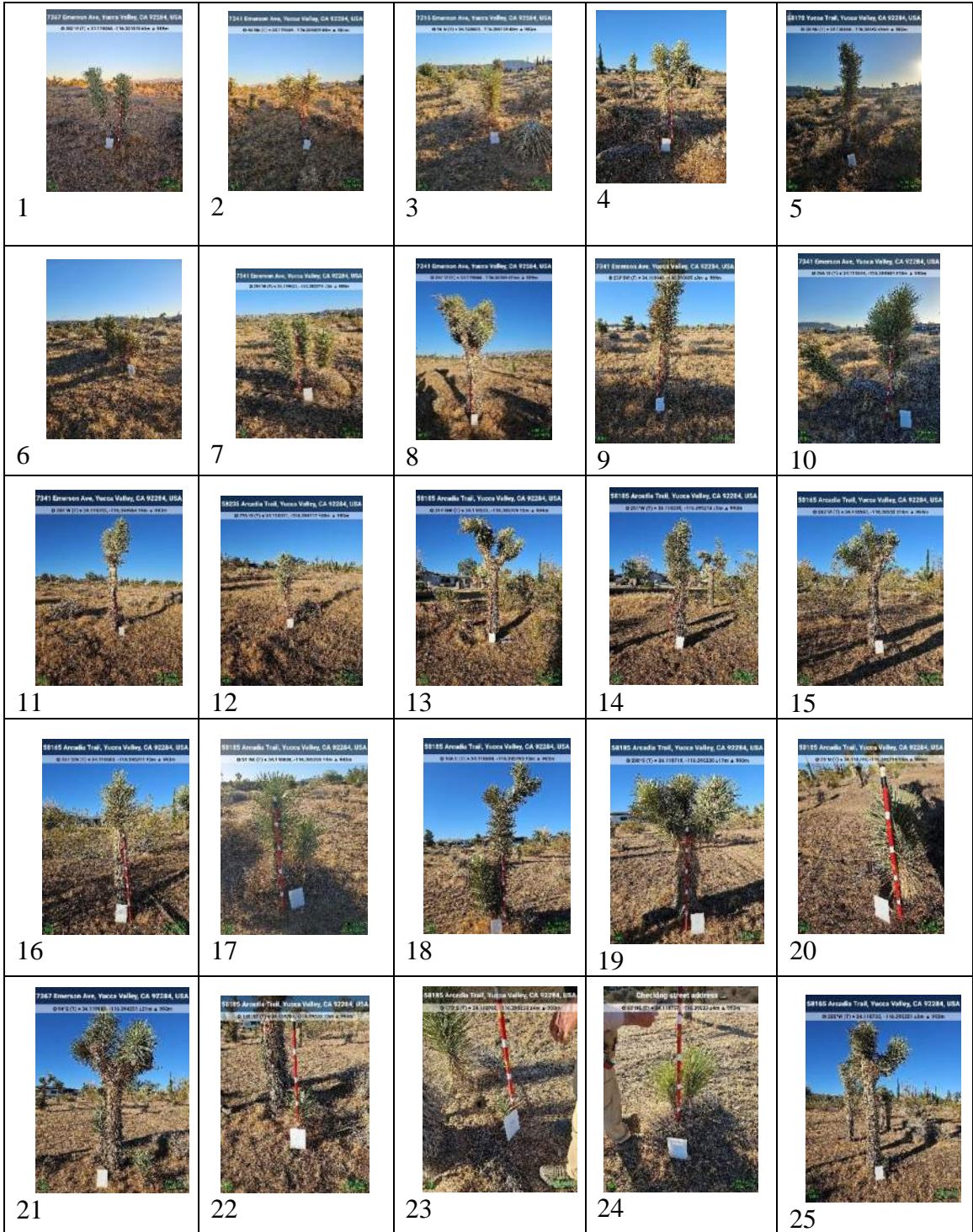
| | | | | | | | | |
|----|----------|-----------|-----|----------|---|-----|------------------------|----------------|
| | | | | | | | empty stalk | |
| 66 | 34.11864 | 116.39573 | B | 2 | L | no | no | |
| 67 | 34.11869 | 116.39575 | B | 2.6 | L | yes | no | |
| 68 | 34.11872 | 116.39576 | A-B | 0.5-2.0 | 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 | |

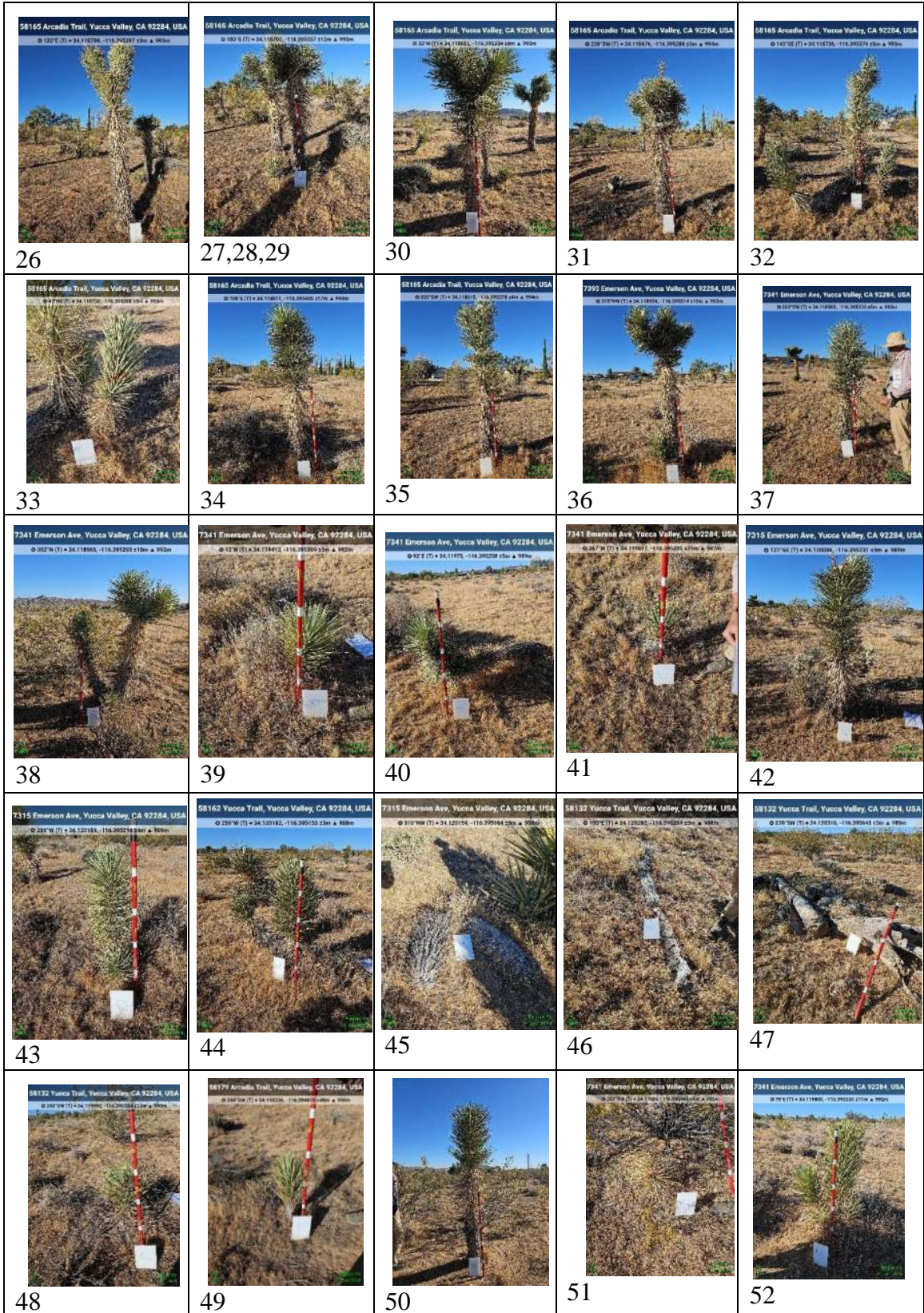
| | | | | | | | | |
|-----|----------|-----------|-----|----------|---|-----|------------------------|----------|
| | | | | | | | empty stalk | |
| 96 | 34.11913 | 116.39592 | B | 2.1 | L | yes | Yes, dried empty stalk | |
| 97 | 34.11903 | 116.39586 | B | 3 | L | yes | Yes, dried empty stalk | |
| 98 | 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 |

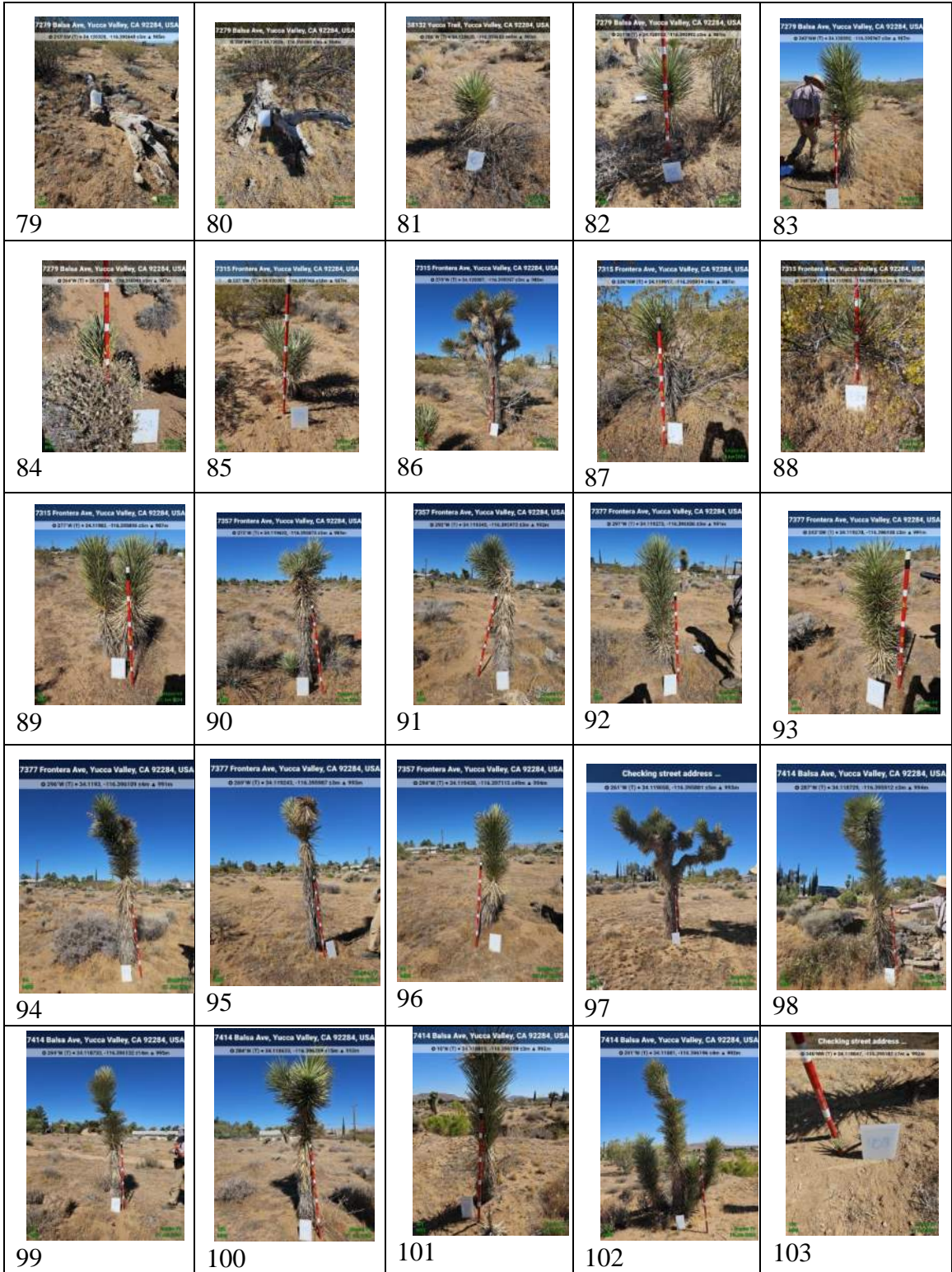
| | | | | | | | | |
|-----|----------|-----------|-----|---------------|---|-----|---------------------------------|--------------------|
| 137 | 34.11864 | 116.39656 | B | 2.6 | L | yes | Yes, dried empty stalk | poor health |
| 138 | 34.11871 | 116.39647 | B | 2.75 | L | yes | Yes, dried empty stalk | 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 | |

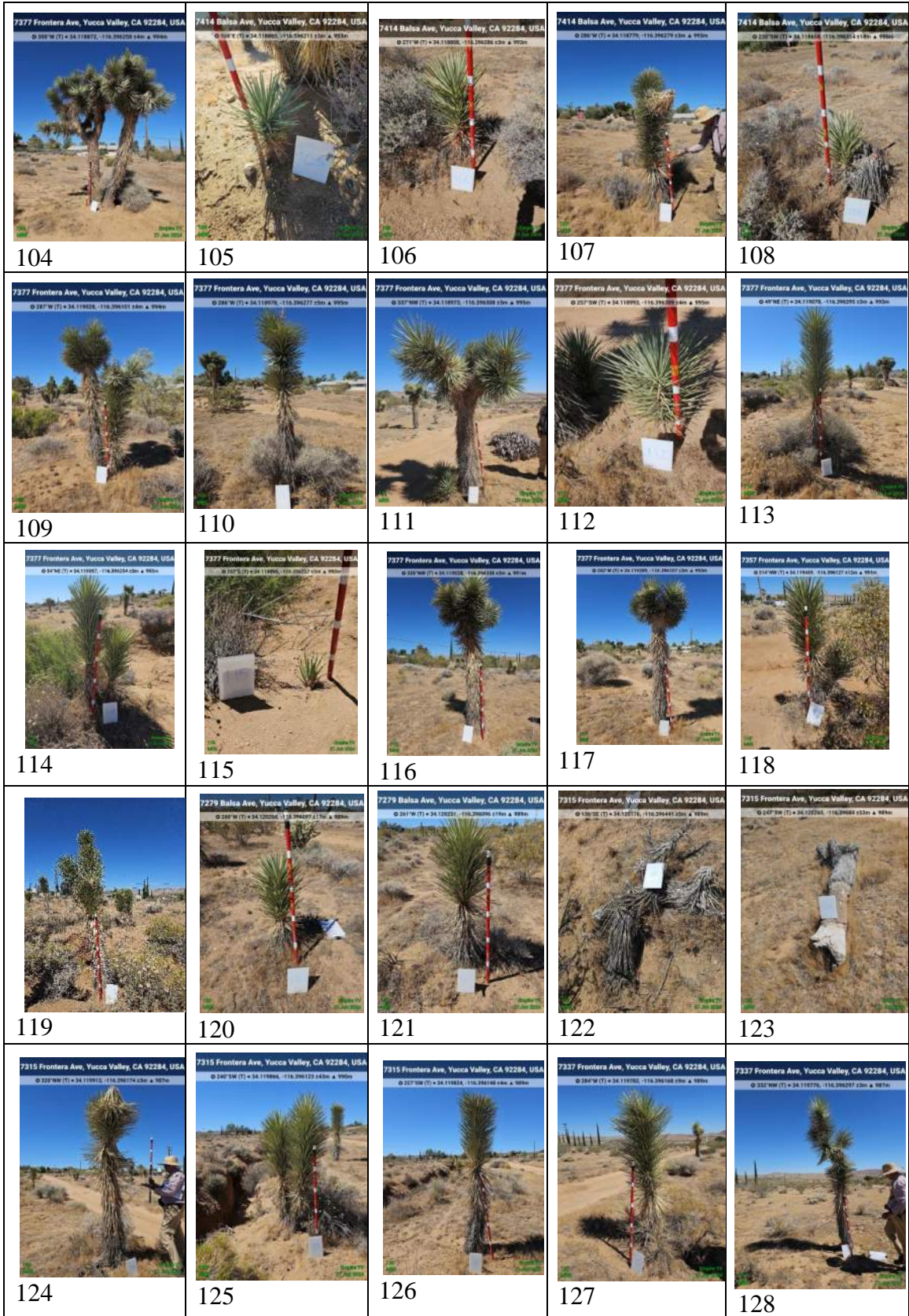
Photographs of the 146 Joshua trees described above are included on the next six pages. The numbers in the lower left hand corner of the photographs correspond to the same numbers given in the first, left hand column of the above table.





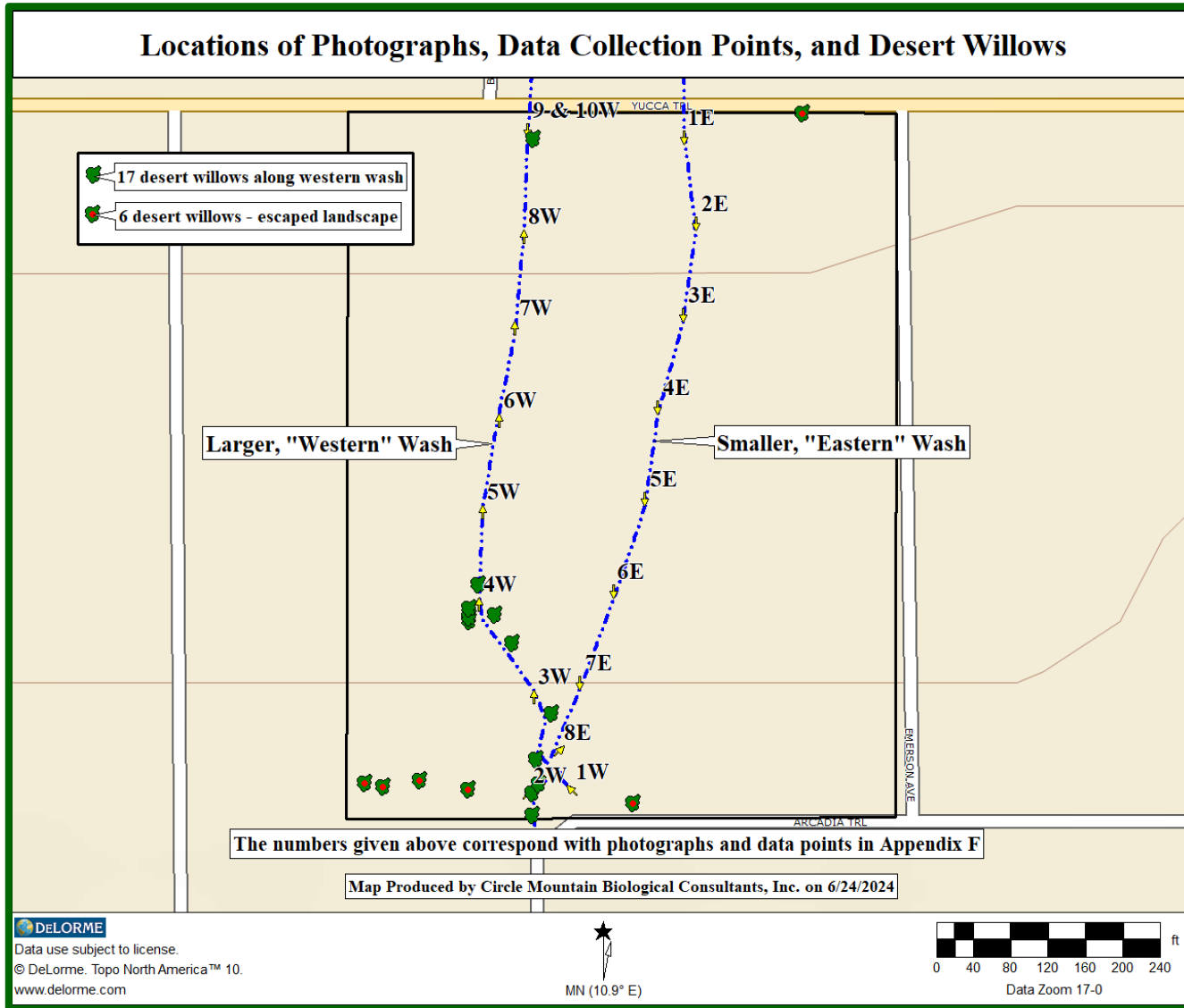








Appendix F. Photographic Exhibits for Jurisdictional Waters Analysis



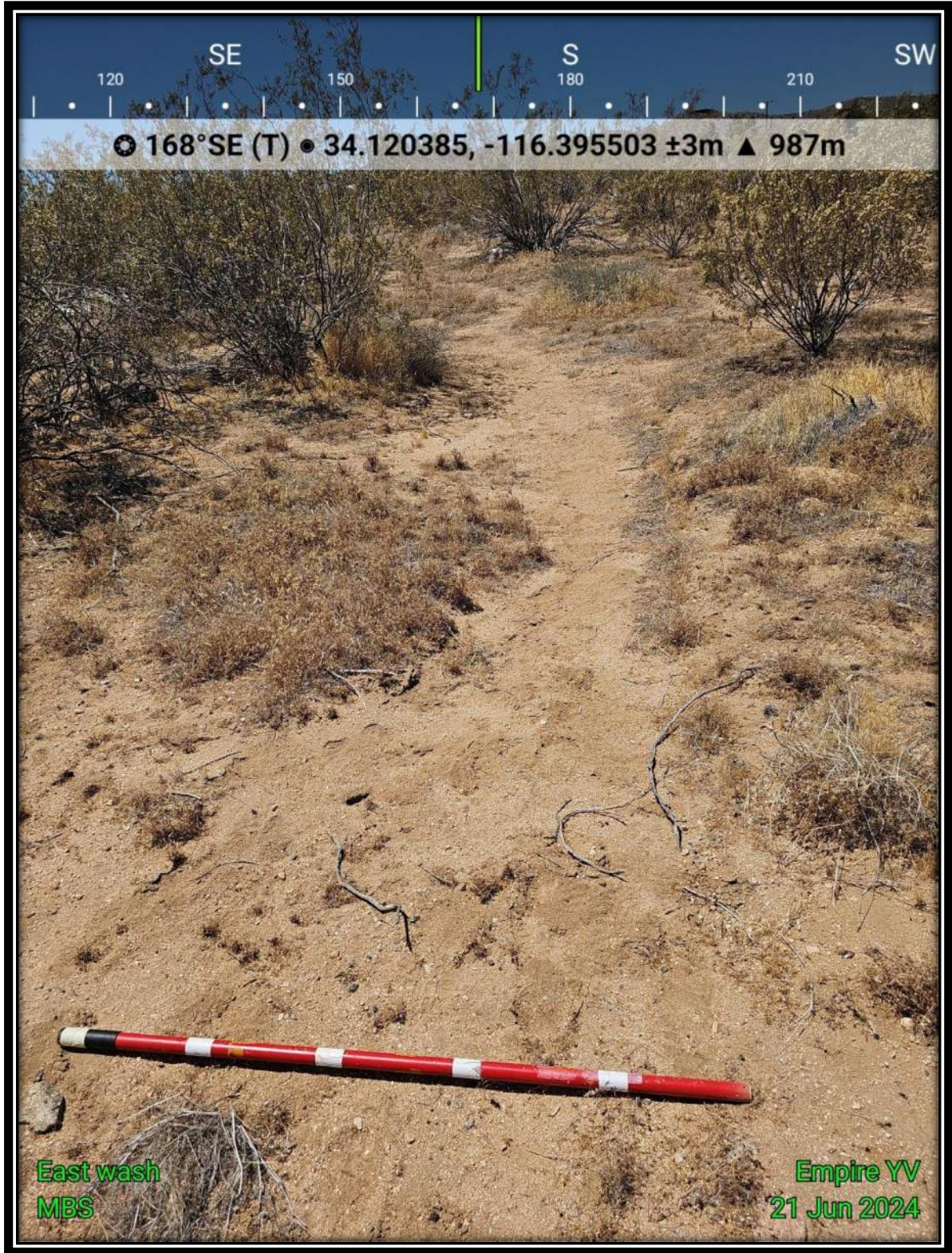


Exhibit 1E. View from the north boundary of the East Wash, facing southeast (see figure on previous page for locations and orientations of all photos).

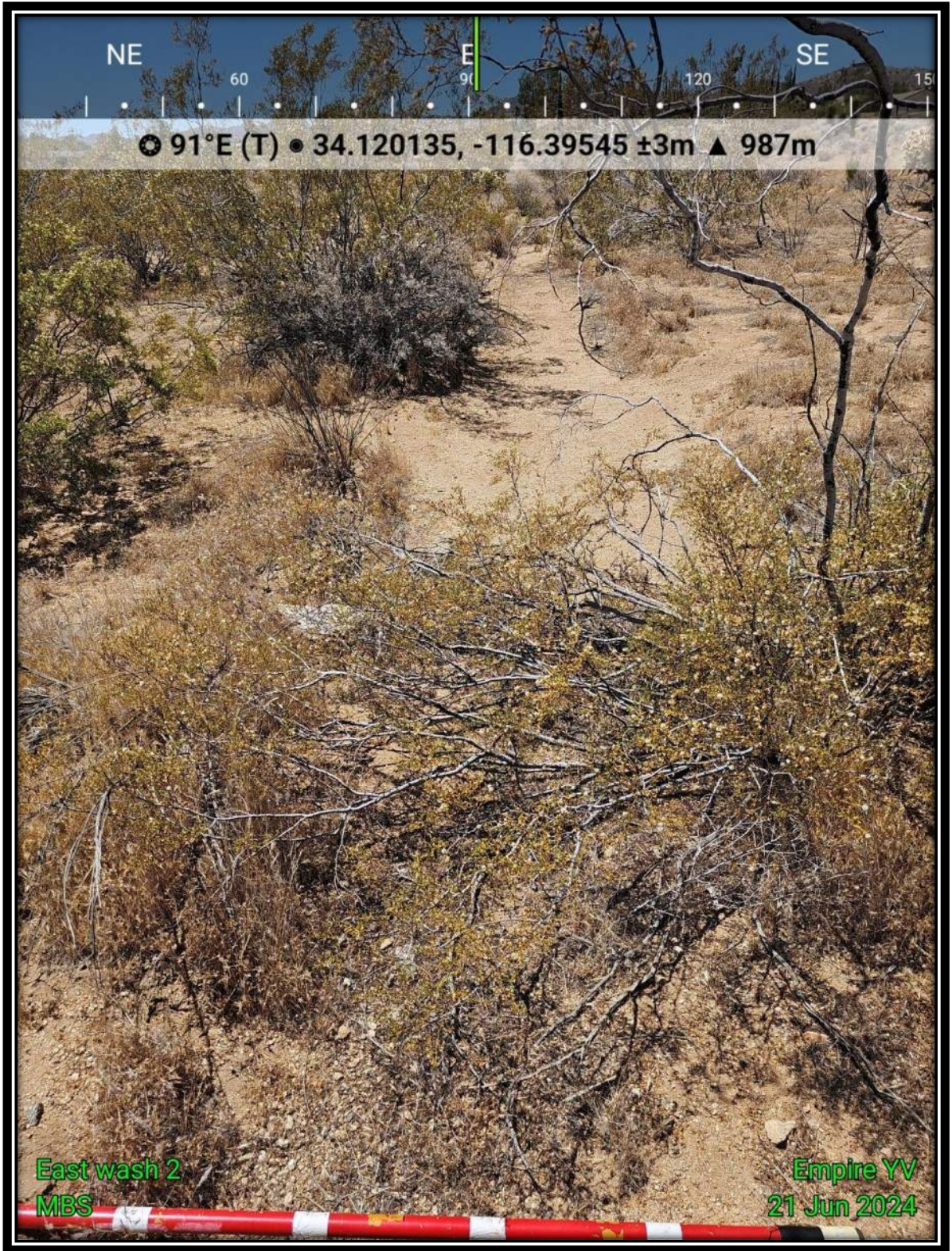


Exhibit 2E. View of the East Wash, facing east.

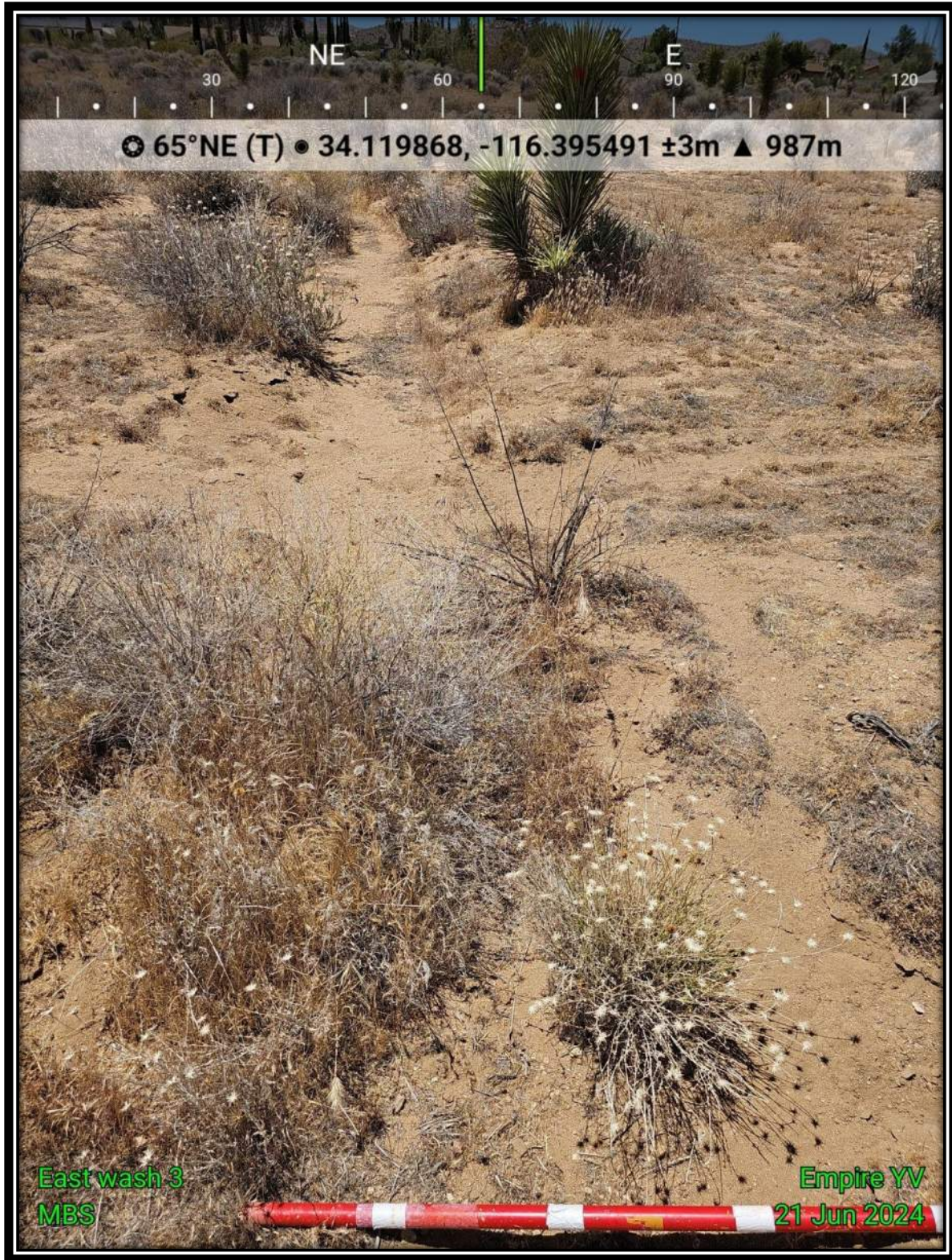


Exhibit 3E. View of the East Wash, facing north east.

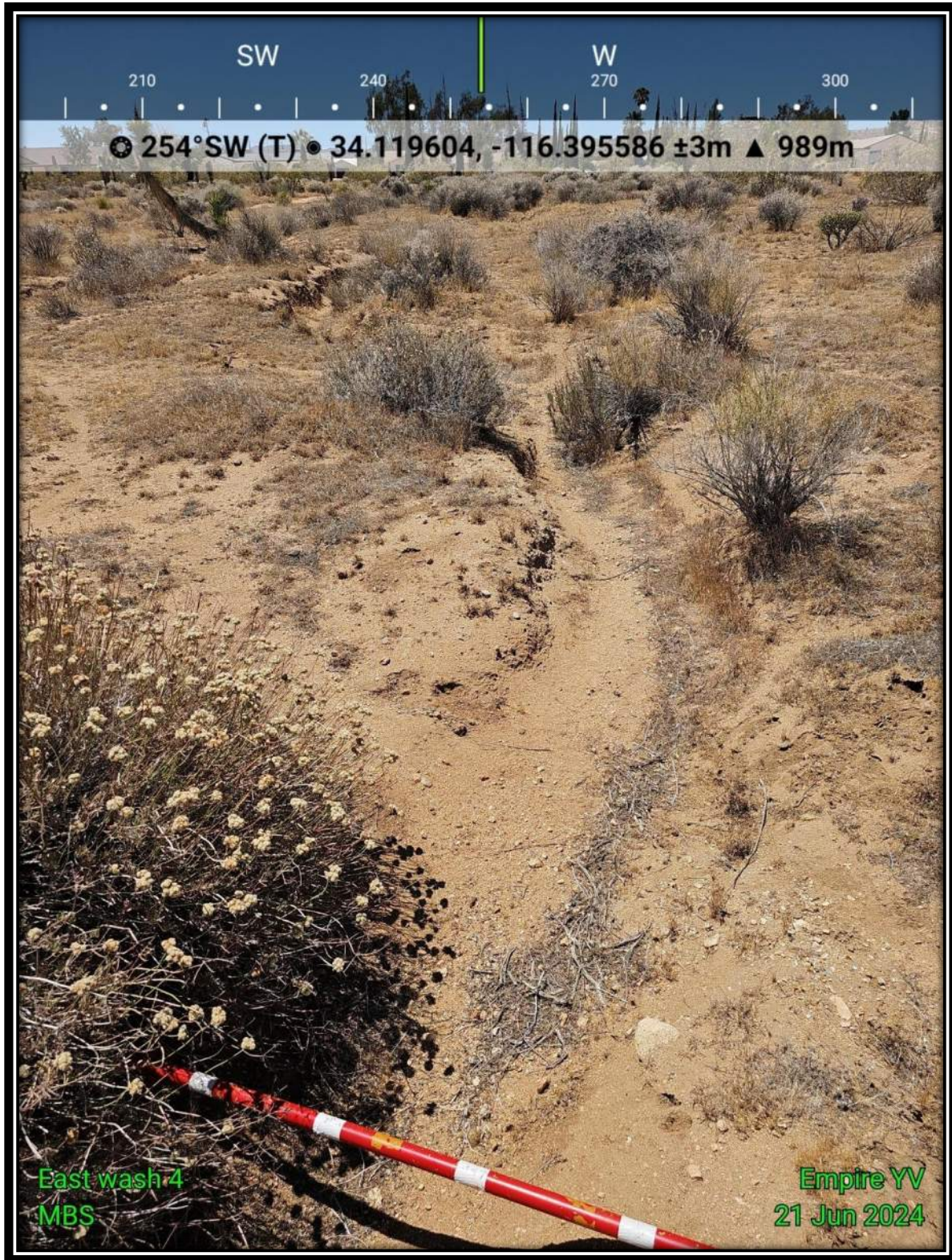


Exhibit 4E. View of the East Wash, facing southwest.

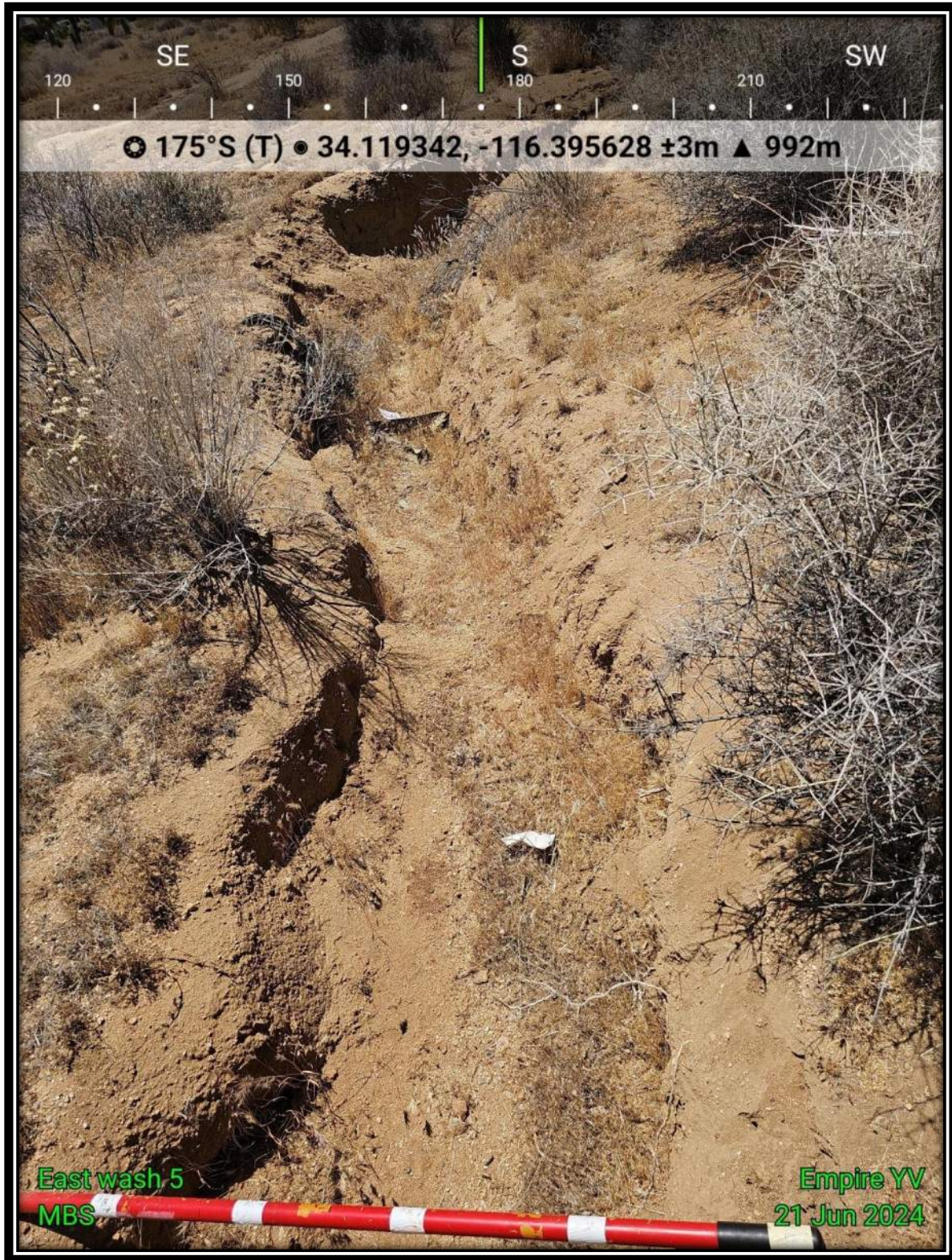


Exhibit 5E. View of the East Wash, facing south.

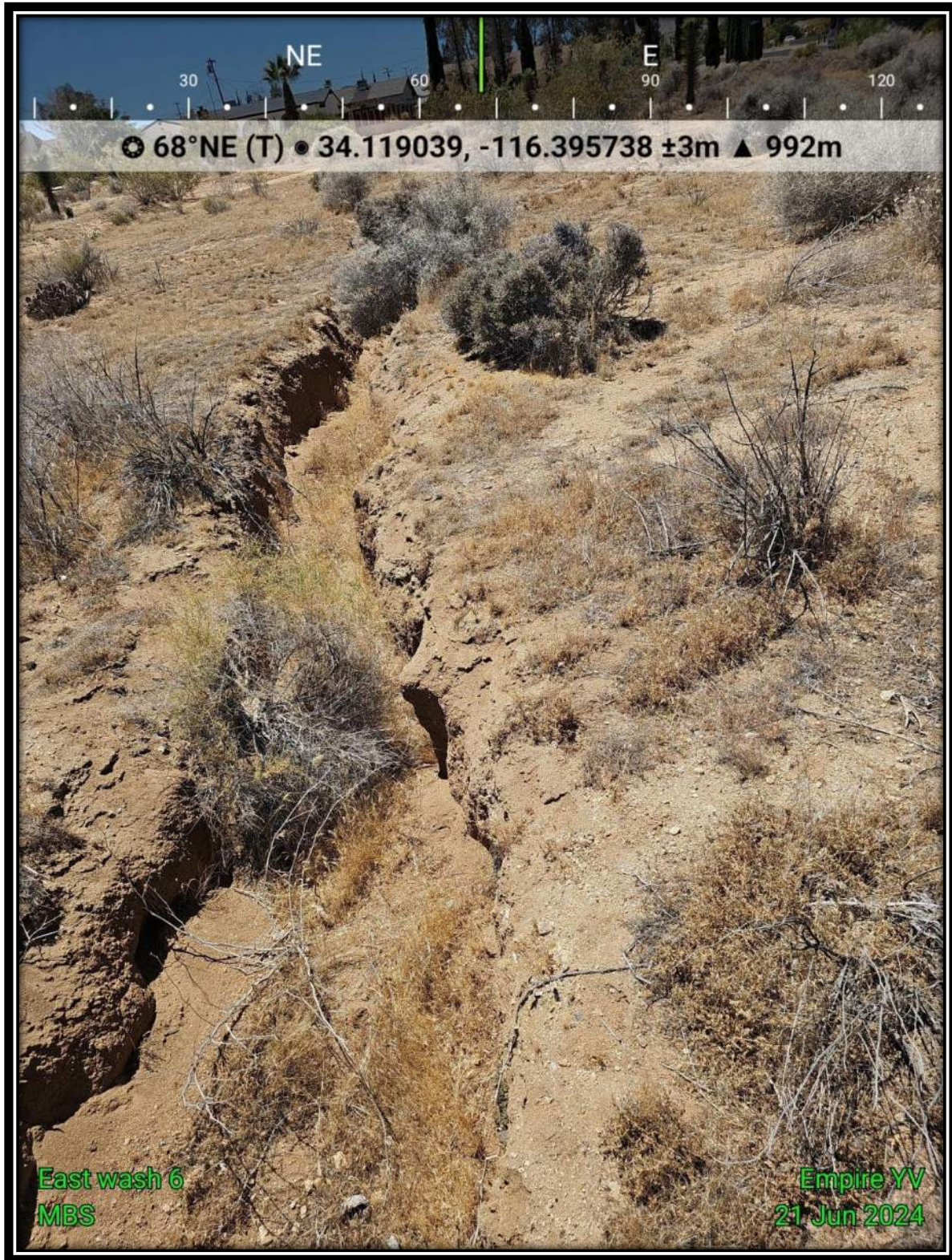


Exhibit 6E. View of the East Wash, facing northeast.



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

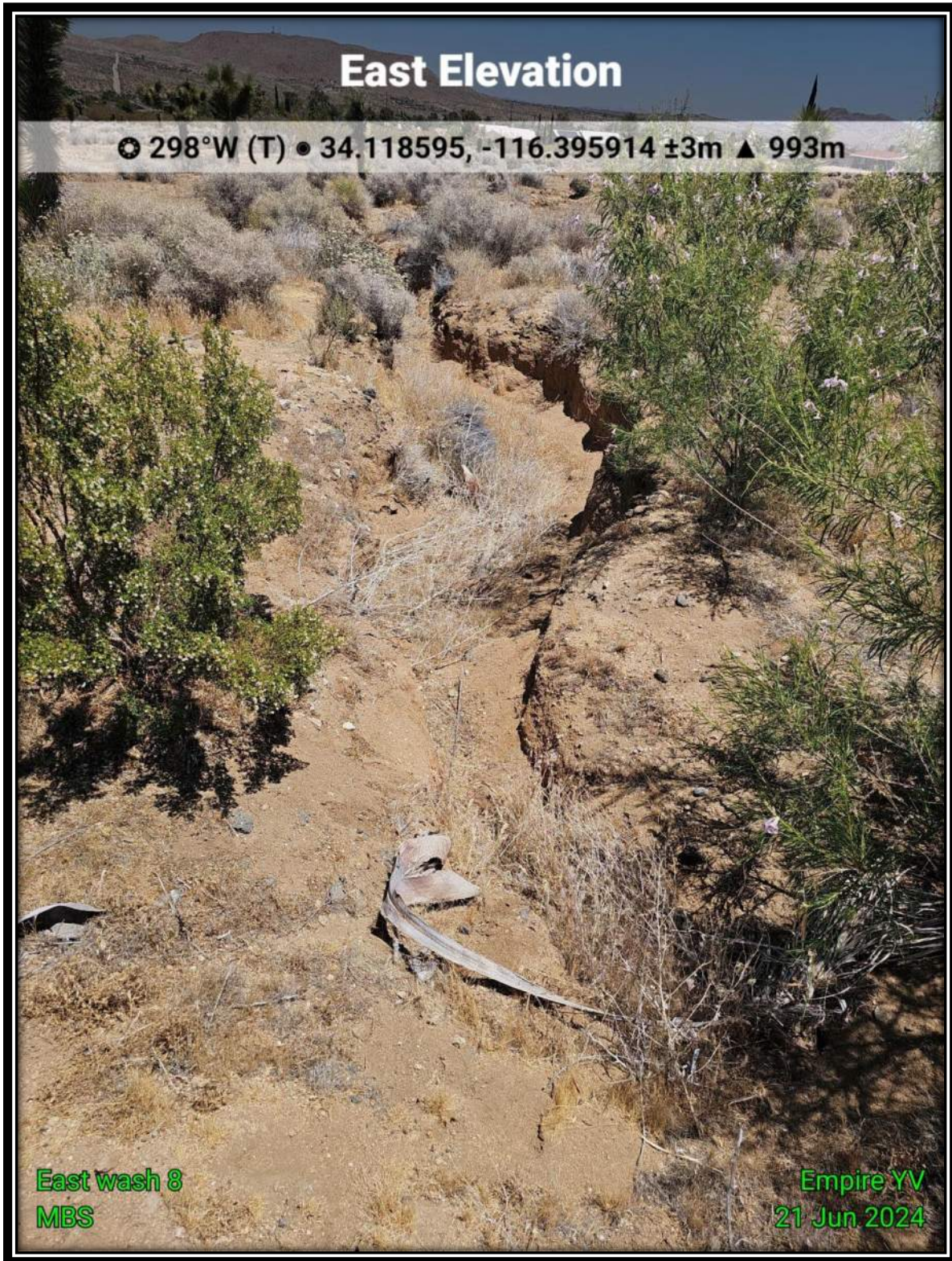


Exhibit 8E. View of the East Wash, facing west.



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

7414 Balsa Ave, Yucca Valley, CA 92284, USA

☉ 42°NE (T) ● 34.118461, -116.396026 ±3m ▲ 994m



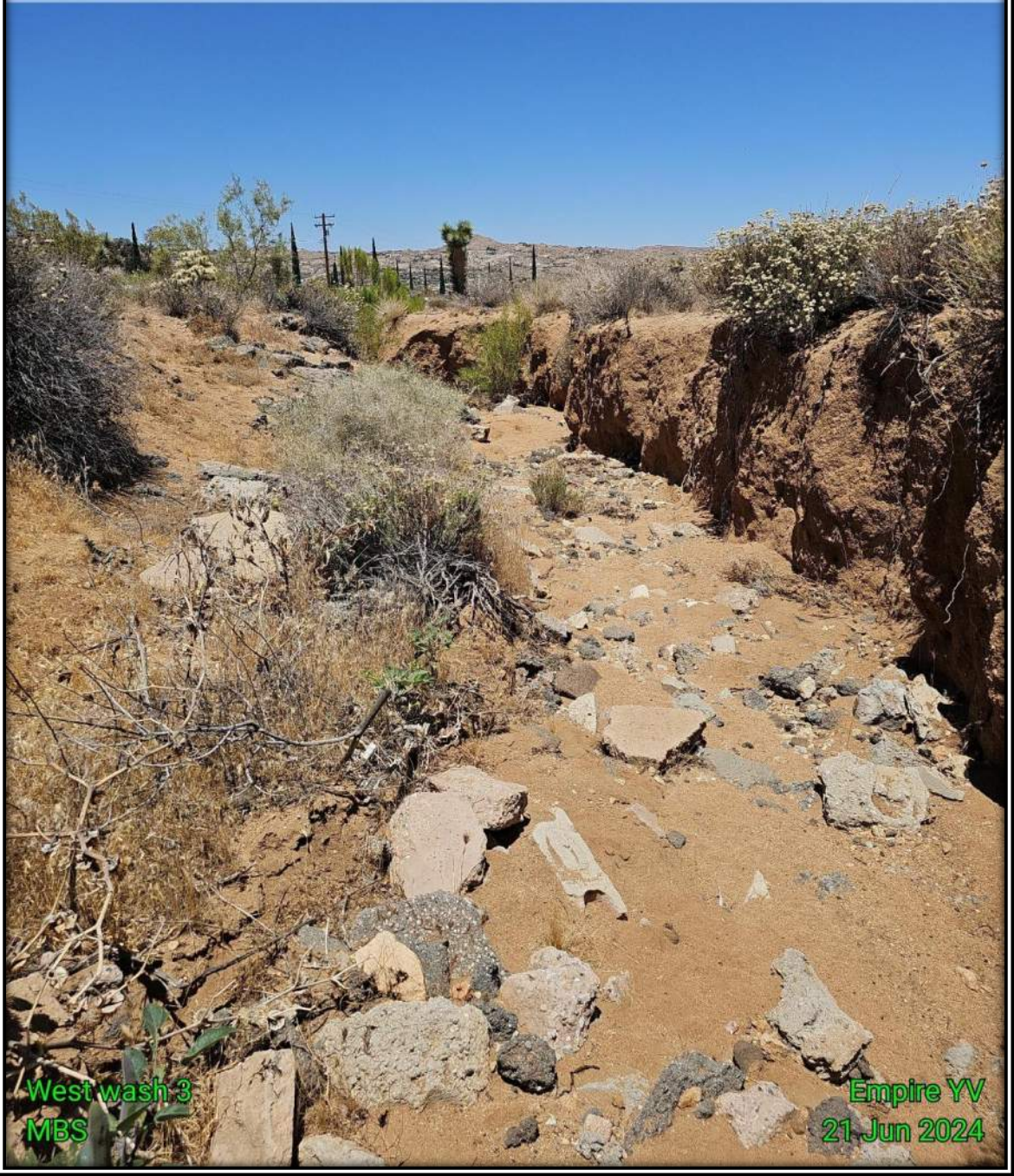
West wash S End west fork 2
MBS

Empire YV
21 Jun 2024

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

7414 Balsa Ave, Yucca Valley, CA 92284, USA

☉ 12°N (T) • 34.118787, -116.396006 ±5m ▲ 994m



West wash 3
MBS

Empire YV
21 Jun 2024

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

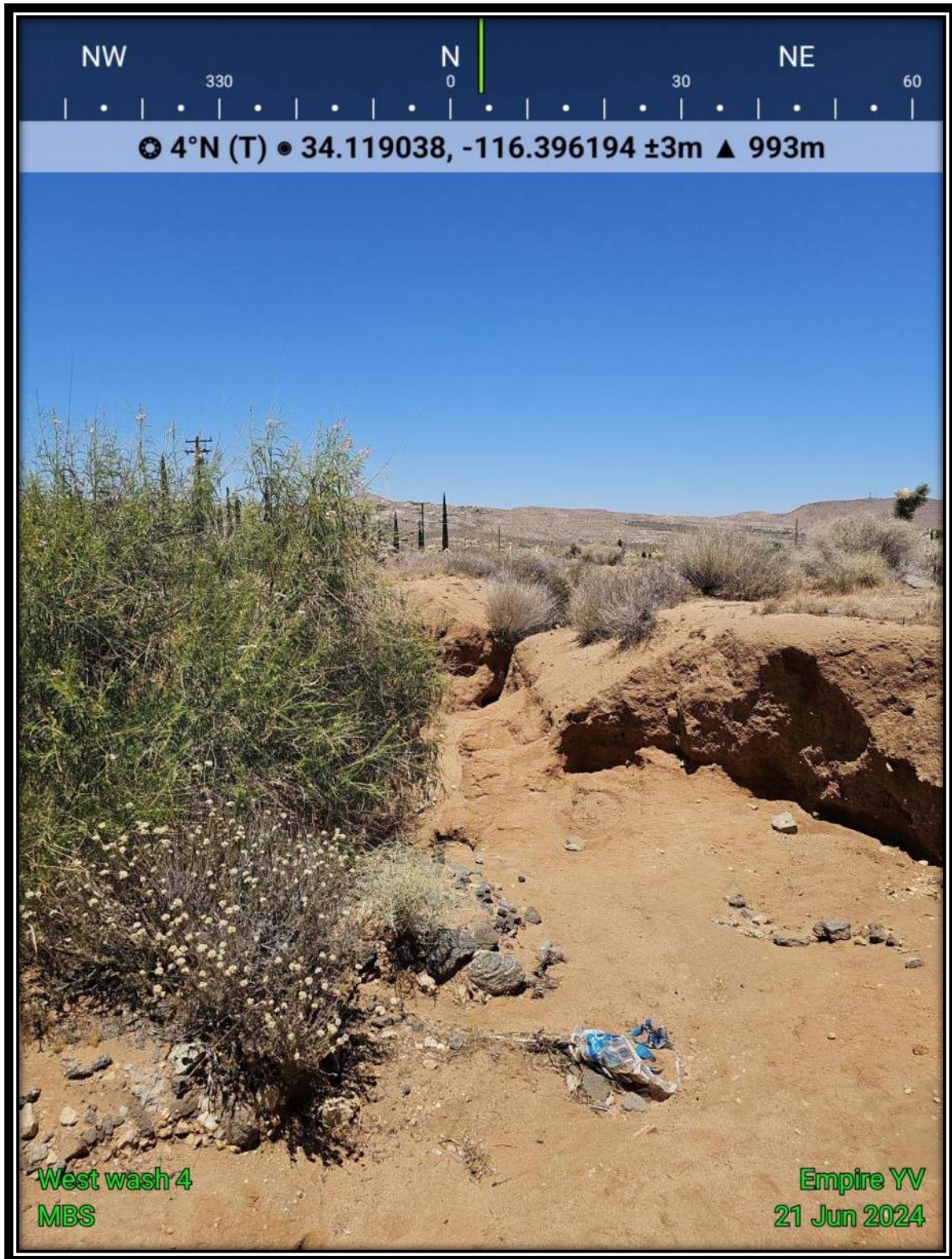


Exhibit 4W. View of the West Wash, facing north.

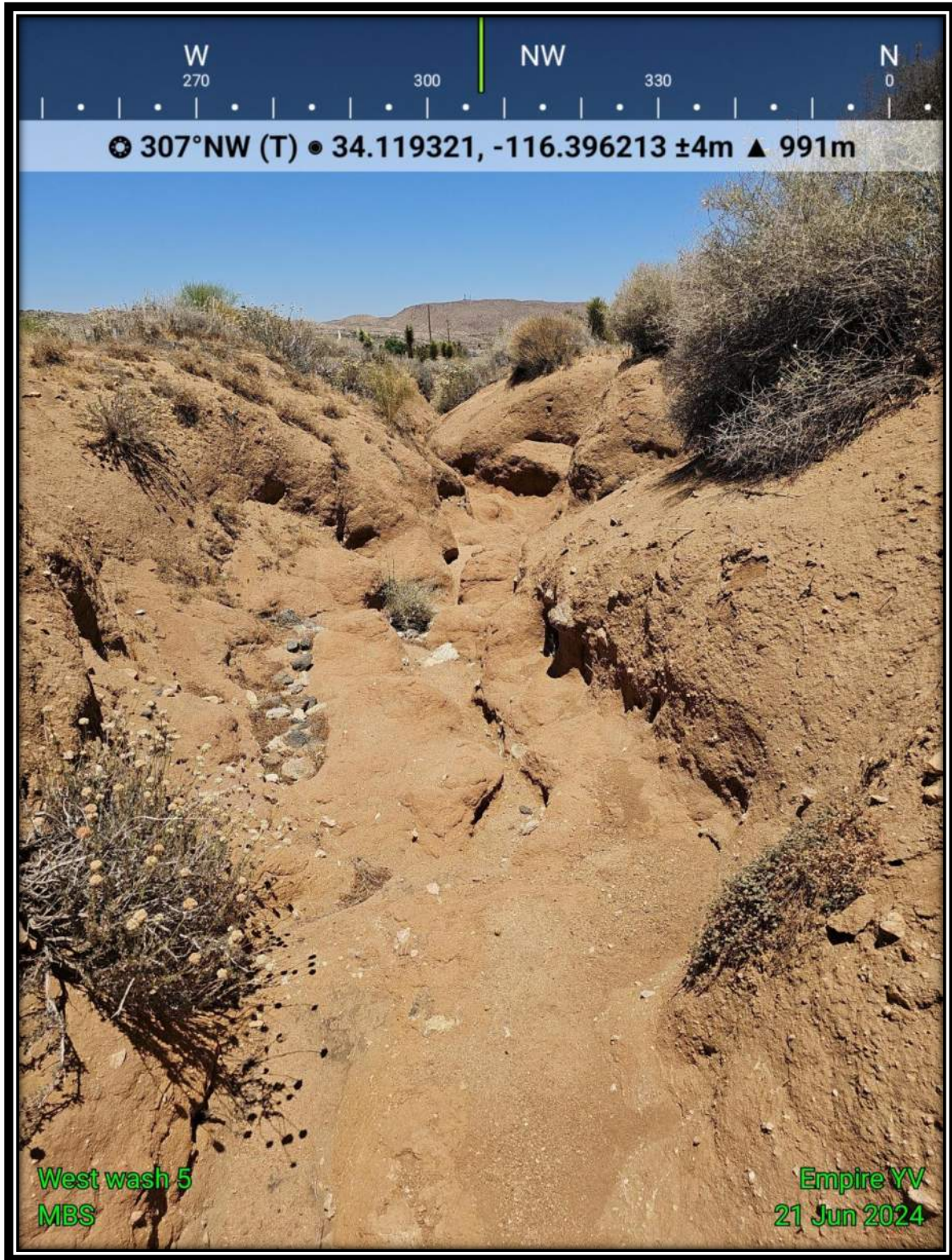


Exhibit 5W. View of the West Wash, facing north.

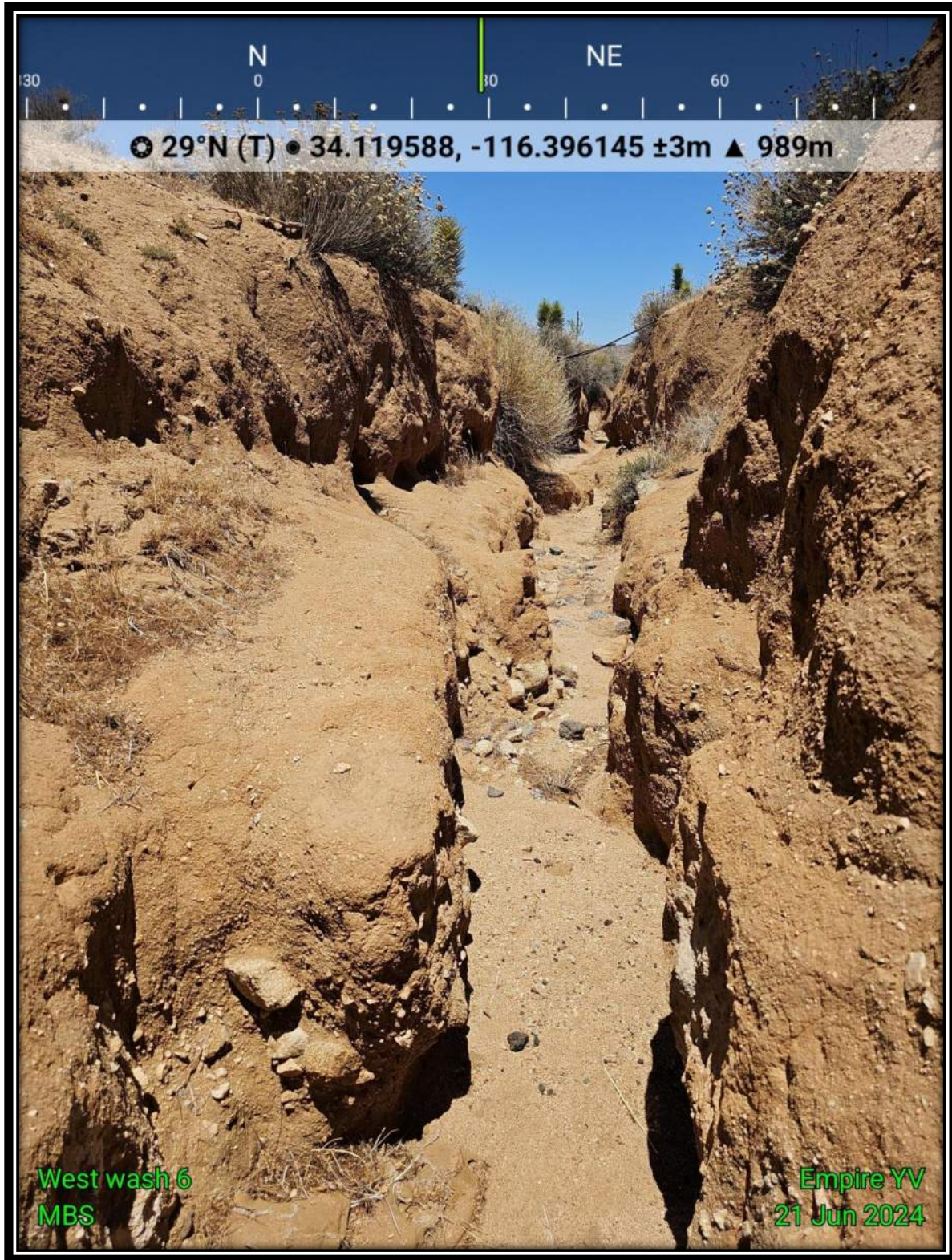


Exhibit 6W. View of the West Wash, facing north.

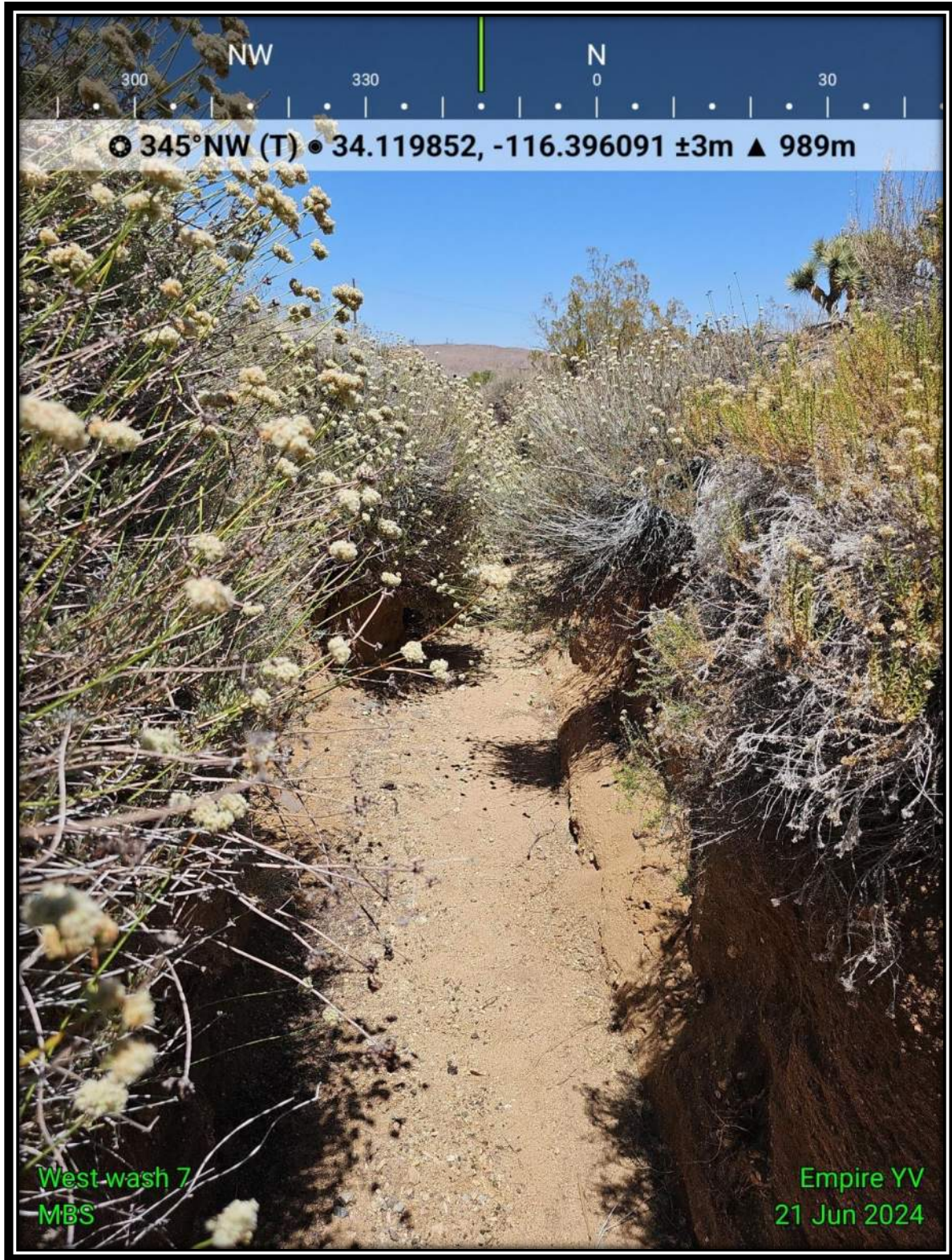


Exhibit 7W. View of the West Wash, facing north.

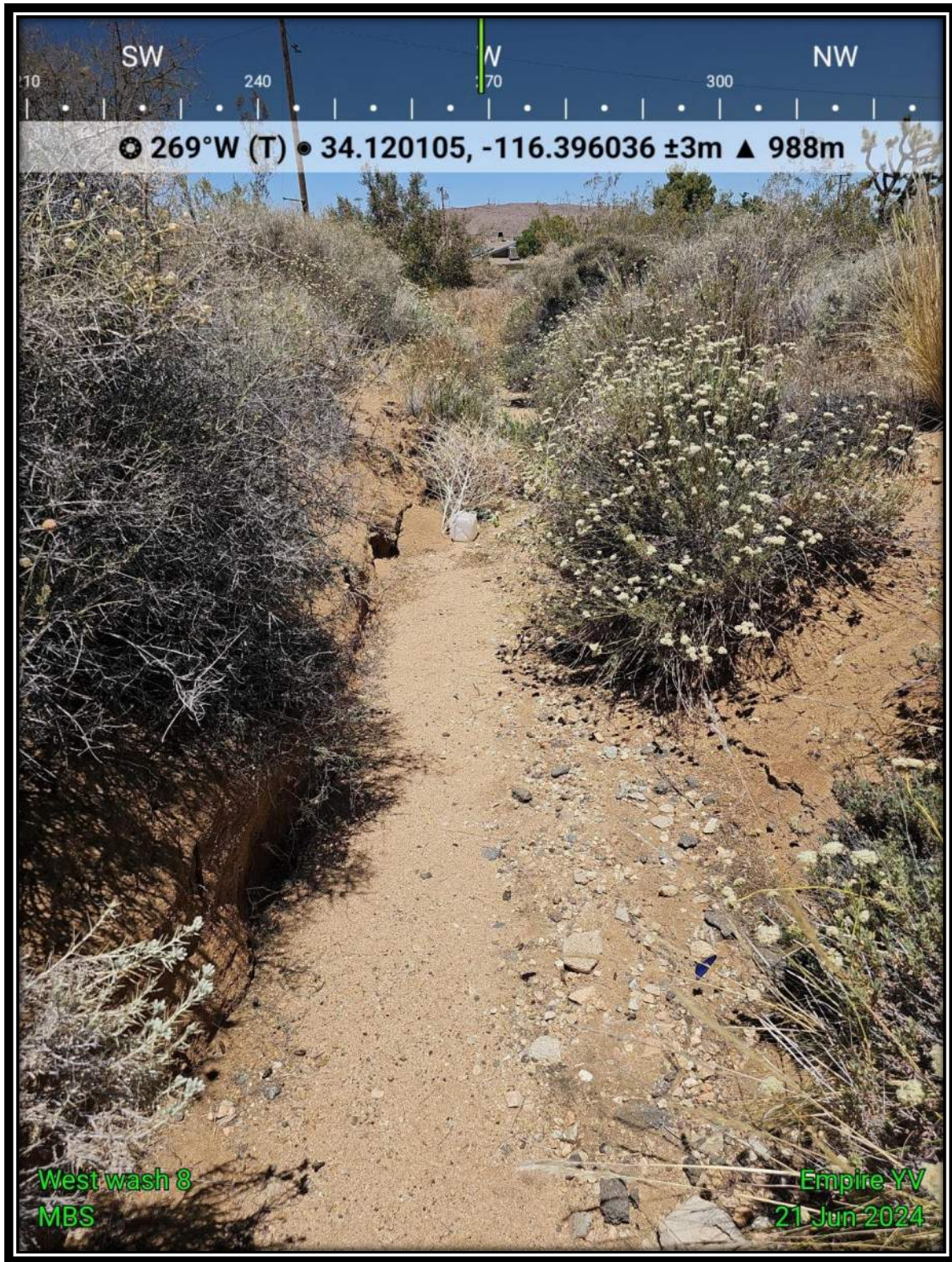


Exhibit 8W. View of the West Wash, facing north.

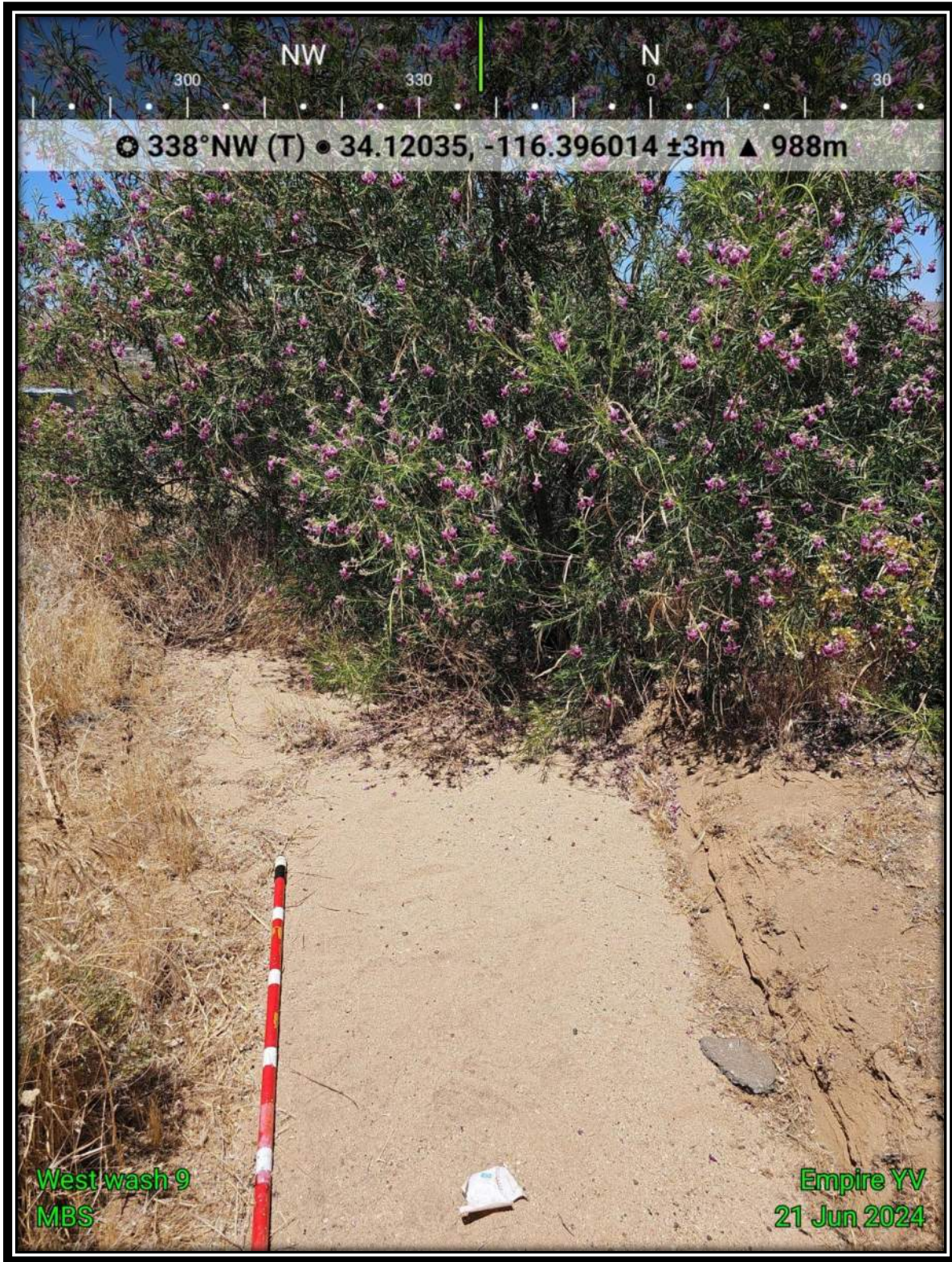


Exhibit 9W. View of the West Wash, facing north.

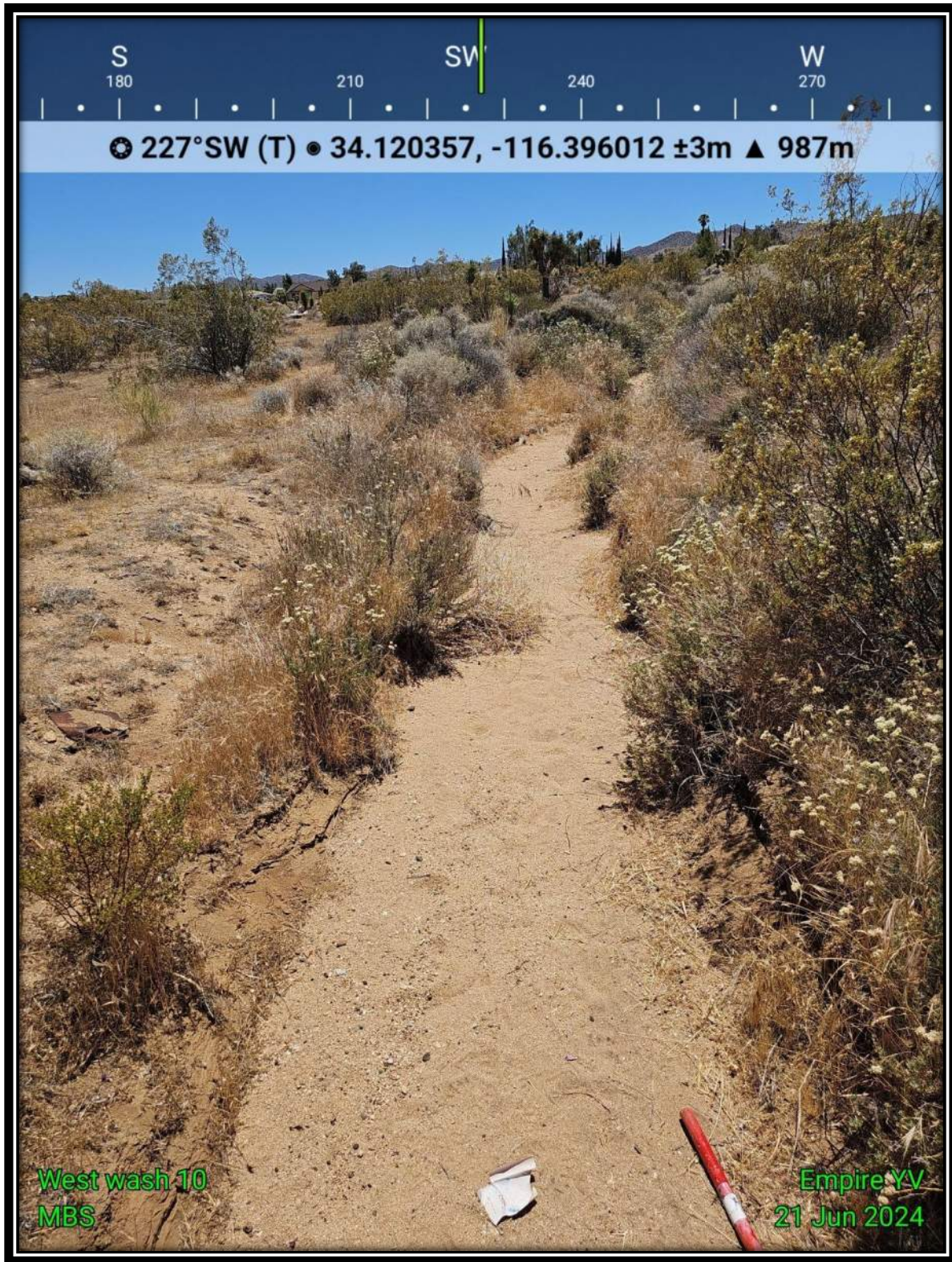


Exhibit 10W. View of the West Wash, facing south.