Focused Desert Tortoise Protocol

Presence/Absence Survey
for
Proposed Commercial/Industrial Warehouse
68 Acres; APN #s 3128-612-02,-03,-04,-05, and -06
in the
City of Victorville

Adelanto 7.5 Minute Quadrangle,
Section 10, Township 5 N, Range 5 W
San Bernardino County, California

May 24, 2023

Prepared for:
Industrial Property Groups, Inc.
care of: Mr. Craig Wilde
991 Lomas Santa Fe Drive, Suite C PMB 469
Solana Beach, California 92705

Prepared by:
Nexus Environmental LLC
Report Prepared by Michael Grimes
Field Work Performed by Michael Grimes, Elmer Llamas,
Robert Williams, Darian Wong and Daniel Solkowitz
Redlands, CA 92374
(909) 644-3491
Michael.grimes@nexusenvironmental.net

Table of Contents

Page

Contents

Executive Summary:

On behalf of IPG Mojave Holdings, LLC (Applicant), Nexus Environmental LLC (Nexus) performed a focused desert tortoise (DT; *Gopherus agassizii*) survey for the Action area in connection with the Proposed Project (Project). The Project is located on an approximate 68-acre site, which includes assessor parcels: APNs 3128-621-02, -03, -04, -05, and -06 in the City of Victorville, San Bernardino County, California). The Project consists of a single industrial warehouse facility with associated parking and a water quality control basin. The Project also includes off-site improvements including 1) 2,870-foot emergency access on Cactus Road from the site, west toward US-395; and 2) sewer line installation from the northeast project corner to approximately 2,610 feet east along Cactus Road (existing dirt road) east to Tawney Ridge Lane; and 3) water supply line installation approximately 2,630 feet east along the northern (westbound) portion of Mojave Drive.

This desert tortoise survey adheres to protocols outlined in the 2019 United States Fish and Wildlife Service (USFWS) desert tortoise protocol methodology (USFWS, 2019).

Pedestrian surveys were conducted on the subject property on March 31st, 2023. Subsequent pedestrian surveys were conducted along Cactus Road on May 12, 2023, to account for area on Cactus Road impacted by the proposed sewer line and emergency vehicle access. Survey results for desert tortoise were negative. Measures are included herein to avoid, minimize, and if necessary, mitigate for potential impacts to desert tortoise resulting from the Proposed Project. With inclusion of the avoidance, minimization measures included herein, pursuant to the California Endangered Species Act, the Project would not result in *Take* of desert tortoise. The Proposed Project is not within a Federally designated Critical Habitat unit; the Proposed Project would not adversely affect federally designated Critical Habitat for desert tortoise.

Introduction

Project Scope and Purpose:

IPG Mojave Holdings, LLC (Applicant) proposes construction of a single industrial warehouse facility with associated parking and a water quality control basin on approximately 68 acres, on multiple assessor parcels (3128-621-02, -03, -04, -05, and -06 in the City of Victorville, San Bernardino County, California. The Applicant proposes a single industrial warehouse facility with associated parking and a water quality control basin.

Emergency Access Road

The Project also includes construction of an approximate 2,870-foot, 26-foot-wide emergency road at Cactus Road, between Onyx Road and the commercial fuel station at Cactus Road and US-395 (Attachment 7).

Sewer Line Installation

The Project also includes installation of sewer line at the Project site, and approximately 2,610-foot along Cactus Road, east, to the nearest connect at Tawney Ridge Lane and Cactus Road (Attachment 5).

Water Line Installation

The Project includes installation of water supply line at the Project site and along the northern (westbound) portion of Mojave Drive for approximately 2,630-foot (Attachment 5).

The proposed Action constitutes a project pursuant to the California Environmental Quality Act (CEQA), located on private lands, administered by City of Victorville (City). CEQA requires the City, as Lead Agency, to determine the potential for the project to result in significant impacts, consider mitigation measures and alternatives capable of avoiding significant impacts, and consider the environmental effects of the project as part of its decision-making process.

Due to the potential biological impacts associated with the development of the site, and associated off-site improvements, IPG Mojave Holdings, LLC, retained Nexus Environmental LLC to conduct a protocol desert tortoise survey of the proposed Action Area (See Attachments 5 - 7). This desert tortoise survey adheres to the 2019 United States Fish and Wildlife Service (USFWS) desert tortoise protocol methodology (USFWS, 2019).

Location:

The Project site is generally located east of United States Route 395, north of State Route 18, west of Interstate 15, and south of Air Expressway in the city of Victorville, San Bernardino County, California. The site is depicted on the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 10 of Township 5 North, Range 5 West. Specifically, the project site is bounded to the north by Cactus Road, to the west by Mesa Linda Avenue, to the south by Mojave Drive, and to the east by Onyx Road within Assessor's Parcel Numbers 3128-621-02, -03, -04, -05, and -06. The Project also includes improvements to portions of Cactus Road for installation of a 2,870-foot, 26-foot-wide emergency access road, installation of sewer lines approximately 2,610 feet east of the Project along Cactus Road to Tawney Ridge Lane. The Project also includes installation of water line, approximately 2,630 feet along the northern portion of Mojave Drive (See Attachments 5-7).

Action Area:

As per 2019 USFWS desert tortoise survey protocol, the Action area for the project includes "areas to be affected directly or indirectly by the action, and not merely the immediate area involved in the action." the Action area for this Project also includes improvements to portions of Cactus Road, which adjoining the northern property boundary, as well as utility installation along Mojave Drive. The Action area also includes utility (sewer line) installation along Cactus Road, to the nearest connection at Tawney Ridge Lane.

The Action Area is depicted on Attachments 5-7, comprised of Assessor's Parcel Numbers 3128-621-02, -03, -04, -05, and -06. As shown on Attachment 5, new sewer and water lines are proposed at the Project site. Accordingly, the Action Area also includes the following roads:

Cactus Road (unpaved)

The Action area also includes Cactus Road, between U.S. 395 and Onyx Road for emergency access road, and east along Cactus Road to Tawney Ridge Lane, for installation of sewer line (Attachments 5-7).

Mojave Drive

The Action Area includes the northern portion of Mojave drive east of the Project site, to account for installation of water supply line (See Attachment 5).

Onyx Road (unpaved)

Adjoins the eastern project boundary. No improvements are proposed to Onyx Road.

Mesa Linda Avenue (unpaved)

Adjoins the western project boundary. No improvements are proposed to Mesa Linda Avenue.

Tawney Ridge Lane

Located approximately 0.5 miles east of the Project at Cactus Road.

(Future) Diamond Road (unpaved)

Located approximately 0.5 miles east of the Project at Mojave Drive.

Desert Tortoise Presence/Absence Focused Survey Results

Literature Review

Nexus obtained an official occurrence records request from the California Department of Fish and

Wildlife California Natural Diversity Database (CNDDB) on May 19, 2023, referenced herein, and included as Attachment 9.

CNDDB search results for the *Adelanto* 7.5-minute USGS quadrangle indicate two desert tortoise sightings in the past 20 years, approximately 0.5 miles east of the project site (Attachment 9). The nearest area of federally listed DT Critical Habitat occurs approximately 7 miles north.[1]

Nexus likewise reviewed the USFWS Information for Planning and Consultation (IPaC) Database (March 2023).

Habitat Assessment Results:

Nexus conducted a protocol level pedestrian survey (10-meter parallel transects) of the Proposed Project site on March 31, 2023. The results of the habitat assessment performed by ELMT Consulting on January 9, 2023 indicate the project site is situated within moderately disturbed creosote/bursage scrub vegetation. The project site consists entirely of vacant, undeveloped land subjected to a high level of anthropogenic disturbances, including off-road vehicular use and illegal dumping, including biohazardous materials. These disturbances occur primarily along the project boundaries, with relatively little disturbance occurring near the center of the project site. Additionally, most of the vegetation has been removed from the southwest quadrant of the project site and this area has been graded.

On-site vegetation density varies from unvegetated to moderately vegetated. The creosote bush scrub plant community is dominated by creosote (*Larrea tridentata*). Other coming plant species include puncturevine (*Tribulus terrestris*), ripgut brome (*Bromus diandrus)*, Russian thistle (*Salsola tragus*), whitemargin sandmat (*Chamaesyce albomarginata*), western Joshua tree (*Yucca brevifolia)*, rubber rabbitbrush (*Ericameria nauseosa*), filaree (*Erodium cicutarium*), winged pigweed (C*ycloloma atriplicifolium*), and purple three-awn (*Aristida purpurea*). Disturbed areas onsite from illegal dumping and off-highway vehicle use are generally barred with minimal vegetation.

The Proposed Project site is not within a federally designated Critical Habitat unit. According to the City of Victorville General Plan Open Space Element, the project site has not been identified as occurring within a Wildlife Corridor or Linkage. As designated by the City of Victorville General Plan Open Space Element, major open space areas documented in the vicinity of the project site include the Mojave River located approximately 4.6 miles east of the site. The site is separated from this identified regional wildlife corridors and linkages by existing development and roadways, and undeveloped land, and there are no riparian corridors or creeks connecting the project site to these areas.

[1] USFWS 2023

The undeveloped land in the immediate vicinity of the project site provides local wildlife movement opportunities for wildlife species moving through the immediate area. CDFW's BIOS 6 online mapper indicates the project site is located on a small mammal movement corridor;[2] however, based on existing conditions, the project site does not function as a major desert tortoise corridor or linkage resulting from intervening and ongoing development along Mojave Drive, and new development occurring in the Project vicinity. The most recent reported desert tortoise sighting nearest the project occurred in 2004, approximately 0.5 miles east of the site. As such, implementation of the Project is not expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement.

The proposed site is located within the range of the desert tortoise. Habitat connectivity would allow for potential sensitive species to move freely in or out of the project area. Additionally, an ephemeral drainage which transects the southeast quadrant, flowing toward the northeast. Joshua trees are present in medium density on site. The soils on site are stabilized sandy-loam and provide suitable consistency for fossorial reptiles and mammals to create burrows.

Habitat and Land Use:

On-site elevation ranges from approximately 2,985 to 3,019 feet above mean sea level and generally slopes from south to north, with no areas of topographic relief. Based on the NRCS USDA Web Soil Survey, the project site is historically underlain by Bryman Loamy Fine Sand (2 to 5 percent slopes) and Cajon Sand (0 to 2 percent slopes).

The Project site features Open Space and Residential land uses in the City of Victorville. The land surrounding the site is to the north, west, and east comprised of undeveloped, vacant land. residential developments, with the latter occurring in lower densities to the east and higher densities to the west and commercial and institutional development beyond. The site is bounded immediately to the north and east by undeveloped, vacant land. Residential development occurs to the immediate south. Melva Davis Academy of Excellence (charter school) and recent residential development occur approximately 0.5 miles east of the Project site at Tawney Ridge Lane and (future) Diamond Road.

Disturbed areas onsite are primarily associated with anthropogenic disturbances such as illegal dumping, and off-road vehicular use. These areas are generally barred with minimal vegetation.

[2] CDFW, 2023

Target Sensitive Species Description:

Justification, Methodology and Qualifications:

Due to the fact that the action area is located within the range of the desert tortoise, 2019 USFWS survey protocol was implemented. Nexus Environmental LLC conducted a protocol-level survey for desert tortoise on March 31, 2023 in accordance with USFWS 2019 desert tortoise protocol. Pedestrian surveys of the "Action Area" consisted of 10-meter-wide belt transects surveys in all potentially suitable habitat, using a hand-held Trimble GPS unit, within the project footprint in a north to south direction. Survey teams carried flashlights hand-held mirrors to view into any potential burrows. Cactus Road was likewise surveyed from US-395 to Tawney Ridge Lane, accounting for construction of 2,870-foot emergency vehicle access road and installation of new sewer line.

Potentially suitable habitat for desert tortoise is not present along Mojave Drive due to existing development, and proximity to Mojave Drive, graded/developed roadway shoulder, and likewise, proximity of nearby residential development to the east.

Desert tortoise zone-of-influence surveys were not conducted during the surveys due to private land restrictions. Neighboring sites were evaluated using binoculars.

The March 31, 2023 desert tortoise field surveyors include Michael Grimes, Elmer Llamas, Robert Williams, Darian Wong and Daniel Solkowitz. Robert Williams (field biologist) is a qualified desert tortoise surveyor, is qualified to handle desert tortoise by USFWS. The combined desert tortoise survey experience of the entire surveying crew is approximately 17 years.

Michael Grimes and Elmer Llamas conducted additional pedestrian surveys on May 12, 2023, accounting for off-site impacts related to the Project on Cactus Road.

Weather Conditions:

March 31, 2023

Weather conditions during the survey effort consisted of clear skies. Wind speed ranged between 2-4 mph toward the west. Temperatures ranged from 53°F-57°F (11.6°C-13.8°C). Winter rainfall during 2022-2023 was well above average.

May 12, 2023

The weather consisted of clear skies. Wind speed ranged from 0 to 8 mph. Temperatures ranged from 81.7°F-92.1°F (27.6°C-33.4°C).

Rare, Endangered or Sensitive Species Field Survey Results:

Desert Tortoise

Desert tortoises were not detected within the project boundary nor were any tortoise sign (scutes, bones, eggshell fragments, burrows, courtship ring, drinking depressions or scat) detected on site. Two burrows were detected on the site, but all burrows were likely coyote or feral dog. Signs of burrowing owl, described below, were observed in connection with the suspected coyote burrows.

Mammals

No special-status mammal species were detected during the surveys within the project site. Evidence of collapsed dens, likely from ground squirrels, is identified on site. California ground squirrel (*Otospermophilus beecheyi*) and Antelope Valley ground squirrel (*Ammospermophilus harrisii*) burrow complexes occur throughout the subject property, and along Cactus Road (dirt road). These species are common in the region.

Burrowing Owl

In connection with separate surveys for burrowing owl (*Athene cunicularia*) (BUOW), a single BUOW was observed on January 31, 2023 site visit, located near the above-noted suspected coyote burrows.

During the March 31, and May 12, 2023 site visits, signs of burrowing owl were observed at the above-noted mammal (coyoted) dens. These mammals dens are suspected coyote burrows or used by feral dogs.

No signs of BUOW nesting, were observed such as feathers or eggshell fragments. However, the dens are likely suitable for hunting given the existing rodent prey base on site. Potential hunting and foraging habitat for BUOW is thus considered on site, however, no signs of nesting were observed. Findings for BUOW are contained in a separate BUOW focused survey report prepared for this Project. See Attachment 5 – Site Photos.

Western Joshua Tree

The Proposed Project site contains approximately 30 documented Joshua trees on site.

Drainages

A single unnamed ephemeral drainage feature was observed within the boundaries of the project. The drainage feature generally flows in a southwest to northeast direction across the project site following onsite topography. The drainage enters the project site along the southern boundary near the southwest corner of the project site via two(2) 24-inch culverts flowing from southof the property under Mojave Drive. From there, the on-site drainage flows in a northeast direction where it exits the middle of the southern boundary of the project site.

No surface water was present during the field investigation, and no riparian vegetation was

observed onsite within the drainage feature during the field investigation. Evidence of an OHWM was observed via scour, changes in substrate, shelving, and lack of vegetation. Across all of the drainage features, the OWHM ranged from approximately 1-10 feet in width. These features only convey surface flow in direct response to precipitation, and do not support riparian vegetation.

The onsite drainage feature, after flowing offsite, eventually infiltrating the Mojave River. As a result, the onsite drainage feature retains a surface hydrologic connection to downstream Waters of the United States and thus comprises jurisdictional Waters of the United States (WOTUS) by the U.S. Army Corps of Engineers. Additionally, the onsite drainage falls under the regulatory authority of the Regional Board as Waters of the State and the California Department of Fish and Wildlife. Attachment 5 contains photographs of the on-site drainage.

Discussion of Field Survey Results:
Field surveys were negative for live tortoises or tortoise signs. Due to the lack of tortoises or tortoise signs, an Incidental Take Permit (ITP) will not be required pursuant to California Fish and Game Code or Federal Endangered Species Act Section (10)(a)(1)(B). However, due to CNDDB occurrences in the area, potential habitat within the site and limited habitat connectivity, this survey includes avoidance and minimization recommendations to prevent unauthorized take, in the unlikely event a tortoise appears on the site during project development.

Desert tortoises are protected under federal and State law. This survey report and recommended avoidance and minimization measures do not constitute authorization for incidental take of the desert tortoise. The results of the tortoise survey are good for up to one year.

Desert Tortoise Avoidance and Minimization Measures (MM) Recommendations:

<u>Desert Tortoise</u>
The findings of the desert tortoise surveys were negative. The surrounding habitat has a low potential to harbor desert tortoises due to edge effects and residential activities; OHV use, dogs, illegal dumping, pedestrian use, etc. The possibility for a desert tortoise to appear on the site from potential adjacent habitat is low because of high levels of development and recent construction surrounding the project. Roadways including Mojave Drive and Highway 395 also serve as impediments to habitat connectivity. In the unlikely event a desert tortoise is detected during the initial clearing and grubbing efforts, the project proponent will need to stop work, consult with the lead agency, and initiate consultation with the federal and State resource agencies.

Avoidance and minimization measures, listed below, are recommended to (1) prevent species such as the desert tortoise from entering onto the site during the construction phase and (2) minimize

the potential for take (3) minimize the impacts associated with the development of the site.

Bio-MM-1. **Pre-construction desert tortoise presence/absence surveys**: A USFWS Qualified/CDFW – approved biologist shall conduct pre-construction presence/absence surveys for desert tortoise during the desert tortoise active season (April to May or September to October) 48 hours prior to initiation of Project activities and after any pause in Project activities lasting 30 days or more. Desert tortoise preconstruction surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) 2019 desert tortoise survey methodology. Preconstruction surveys shall be completed using 100-percent visual coverage for desert tortoise and their sign and shall use perpendicular survey routes within the Project site and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project Activities cannot start until 2 negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented.

Results of the survey shall be submitted to CDFW prior to start of Project activities. If the survey confirms desert tortoise absence, the CDFW-approved biologist shall ensure desert tortoise do not enter the Project area. Should desert tortoise presence be confirmed during the survey, the Project Proponent shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take (California Fish and Game Code Section 86 defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) to desert tortoise.

If complete avoidance of desert tortoise cannot be achieved, the Project Proponent will not undertake Project activities, and Project activities be postponed until appropriate authorization (i.e., California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Fish and Game Code section 2081) is obtained. If complete avoidance of desert tortoise is infeasible, the Project Proponent would be required to apply for a CESA ITP and prepare a site-specific Desert Tortoise Translocation Plan (Plan) that will provide details on the proposed recipient site, desert tortoise clearance surveys and relocation, definitions for Authorized Biologists and qualified desert tortoise biologists, exclusion fencing guidelines, protocols for managing desert tortoise found during active versus inactive seasons, protocols for incidental tortoise death or injury, and will be consistent with project permits and current USFWS and CDFW guidelines.

The Plan shall also include a requirement for communication and coordination with

the Bureau of Land Management (BLM) regarding the desert tortoise recipient site. Prior to construction, the Plan shall be subject to the review and approval of the CDFW and the USFWS. Impacts shall be offset through acquisition of compensatory land within occupied desert tortoise habitat and/or monetary contributions to other recovery efforts in the West Mojave and/or mitigation bank credit purchase from a CDFW-approved mitigation bank mitigated at a ratio of no less than 3:1. Final mitigation acreage determinations are subject to approval of CDFW and federal wildlife agencies.

Bio-MM-2. **Worker Environmental Awareness Training**: A qualified biologist must present a biological resource information training for desert tortoise prior to project activities to all personnel that will be present within the project site for longer than 30 minutes at any given time.

Bio-MM-3. **Deceased or Injured Tortoise Within the Project Site**: The CDFW-approved biologist will inform USFWS and CDFW of any injured or deceased desert tortoise (and other special-status species) found on site (verbal within 24-hours and written notification within 5-days).

Bio-MM-4. **Species Avoidance**: If during project activities a desert tortoise is discovered within the project site, all activities must stop within 50-feet and the CDFW-approved biologist must be notified. Coordination with respective State and Federal resource agencies will be required prior to restarting activities.

Bio-MM-5. **Worker Environmental Awareness Training**: A qualified biologist must present a biological resource information training for desert tortoise, Mohave ground squirrel, and burrowing owl prior to project activities to all personnel that will be working within the project site. The same instruction shall be provided for any new workers prior to their performing any work on-site. Interpretation shall be provided for any non-English speaking workers.

Bio-MM-6. **Deceased or Injured Tortoise Within the Project Site**: USFWS and CDFW shall be informed of any injured or deceased desert tortoise (and other special-status species) found on site (verbal notice within 24-hours and written notification within 5-days).

Bio-MM-7. **Species Avoidance**: If during project activities a desert tortoise is discovered within the project site, all activities shall immediately stop and the CDFW shall be immediately notified (within 24 hours). Coordination with respective State and Federal resource agencies shall be required prior to restarting activities to determine appropriate

avoidance, minimization, and mitigation measures.

Conclusion

At the time of the focused survey no live tortoises were detected on the Proposed Project Site (Action Area). The absence of positive tortoise sign within the BSA indicates a low density/low potential tortoise population in the site. Desert tortoises are therefore deemed absent from the site. However, due to connectivity to adjacent habitat, desert tortoises could potentially enter the Proposed Project area at any time. Appropriate measures for the avoidance of impacts to the desert tortoise are outlined above, following the recommendations of the USFWS and other agencies. Following the recommendations of this report, pursuant to the California Endangered Species Act, Nexus Environmental has determined the Proposed Project (Action) would not result in *take* of desert tortoise (Gopherus agassizii). Likewise, pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act, the Proposed Project would not result in *take* of desert tortoise. The Proposed Project would not impact federally designated Critical Habitat.

Literature Cited and References:

California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS), BIOS 6 Viewer, available at https://wildlife.ca.gov/Data/BIOS (accessed May 20, 2023)

California Department of Fish and Wildlife California Natural Diversity Database (Rarefind 5 records for Adelanto, CA USGS quadrangle. May 1 9, 2023)

ELMT Consulting. Biological Resource Assessment for an Approximate 68-Acre Project Site Located within Assessor Parcel Numbers 3128-621-02, -03, -04, -05, and -06 in the City of Victorville, San Bernardino County, California. 2023

Google Earth Pro Aerial Imagery (2023)

United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey (2023)

United States Fish and Wildlife Service Critical Habitat designations for Threatened and Endangered Species

United States Fish and Wildlife Service Desert Tortoise Exclusion Fence Specifications, 2005. (http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/)

United States Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.

United States Fish and Wildlife Service. 2010a. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*)

United States Fish and Wildlife Service. 2010b. Endangered Species Act of 1973 as amended through the 108th Congress. Accessed online at: http://www.fws.gov/endangered/esa-library/pdf/ESAall.pdf

United States Fish and Wildlife Service. 2010c. Species Profile: Desert tortoise (*Gopherus agassizii*). Online at: [http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C04L]

United States Fish and Wildlife Service Information for Planning and Consultation Online at: [http://ipac.ecosphere.fws.gov/] (Accessed March 03, 2023)

This concludes the habitat assessment for the 68-acre Proposed Project (APNs: 3128-621-02, -03, -04, -05, and -06) in the City of Victorville, San Bernardino County, California.

Certification

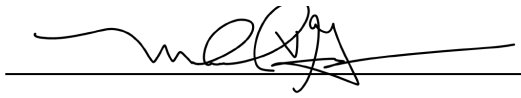
Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this report was performed by me or under my direct supervision.

I have not signed a non-disclosure or consultant confidentiality agreement with the Proposed Project applicant or applicant's representative, and I have no financial interest in the project.

Federally and/or state threatened/endangered species may not be taken under State and Federal law. The report and recommended avoidance and minimization measures included in this report do not constitute authorization for incidental take of the desert tortoise or any other sensitive species.

Field Work Performed by: Michael Grimes, Elmer Llamas, Robert Williams, Darian Wong, and Daniel Solkowitz on March 31, 2023, and on May 12, 2023 (Michael Grimes, Elmer Llamas).

Biological Technical Report Prepared by Michael Grimes.



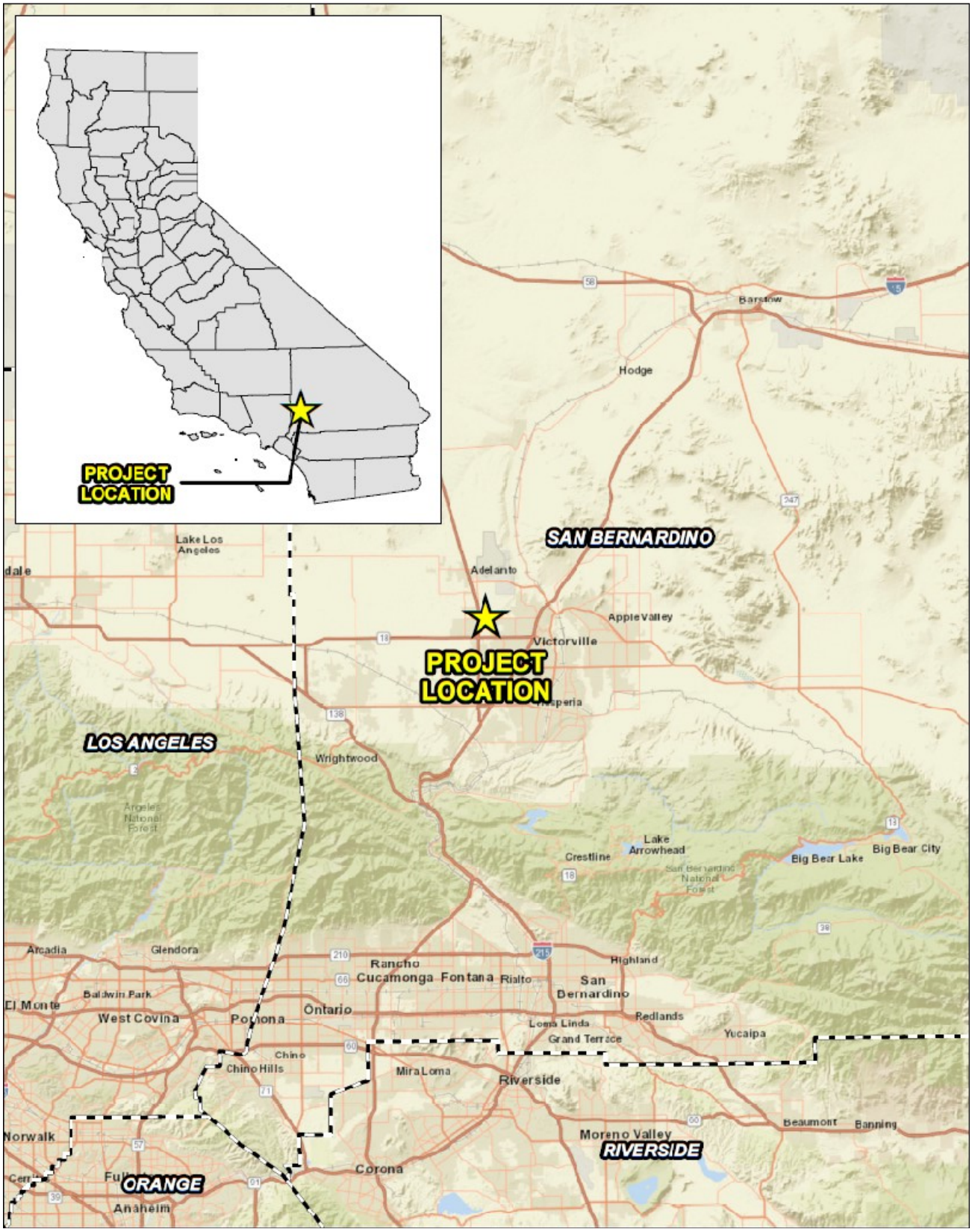
Date: May 24, 2023

Michael V. Grimes
Field Biologist/Principal Planner
Nexus Environmental LLC

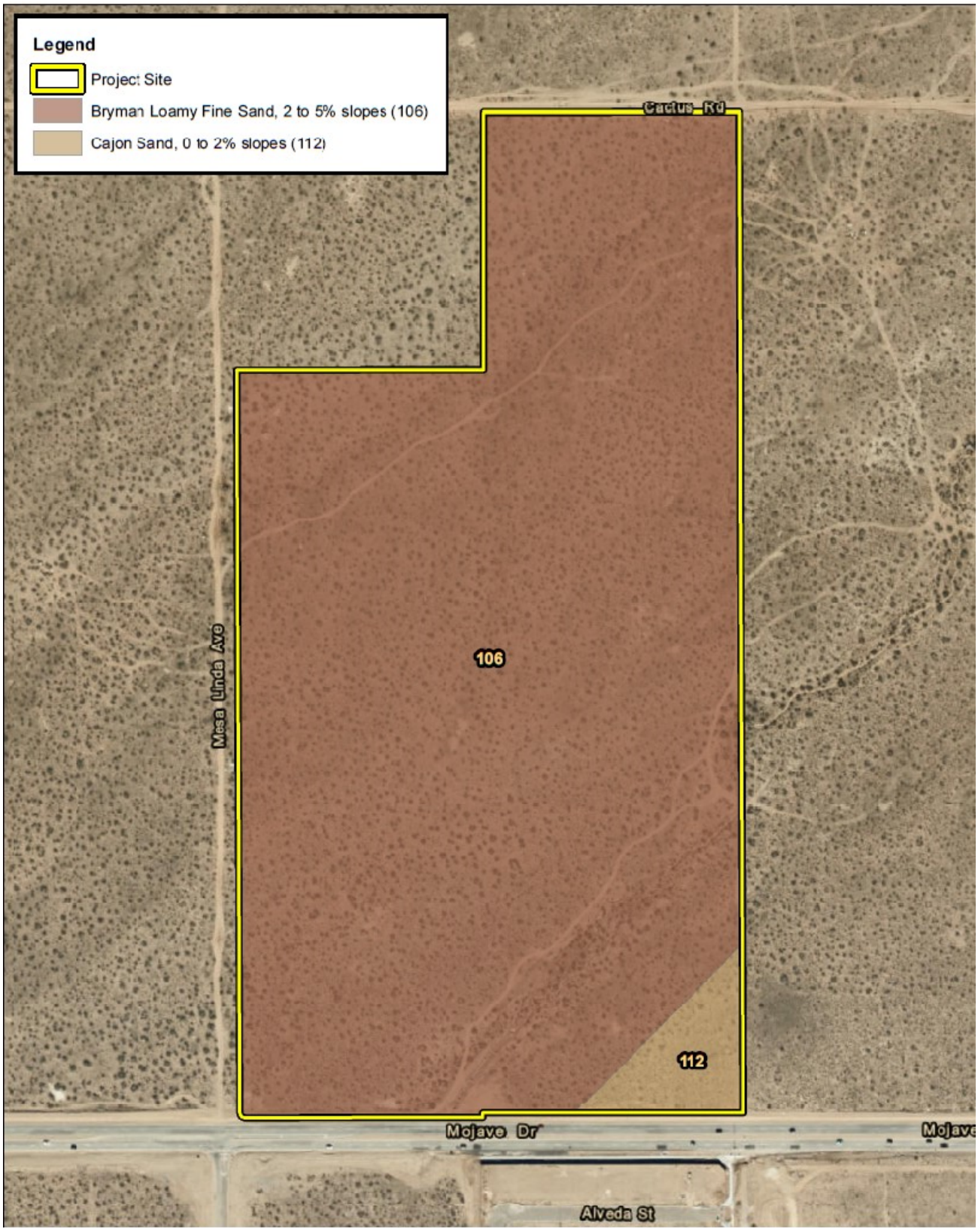
Attachments

1. Project Vicinity Map
2. Soil Map
3. Vegetation Map
4. Topographic Map
5. Project Layout with Proposed Water and Sewer Line Installation
6. Proposed Project Layout
7. Proposed Emergency Access Road
8. Site Photos
9. CNDDB Database Records Search Results
10. Table of Special Status Plant and Wildlife Species with Potential to Occur on the Proposed
11. USFWS Desert Tortoise Survey Forms

Attachment 1: Project Vicinity Map

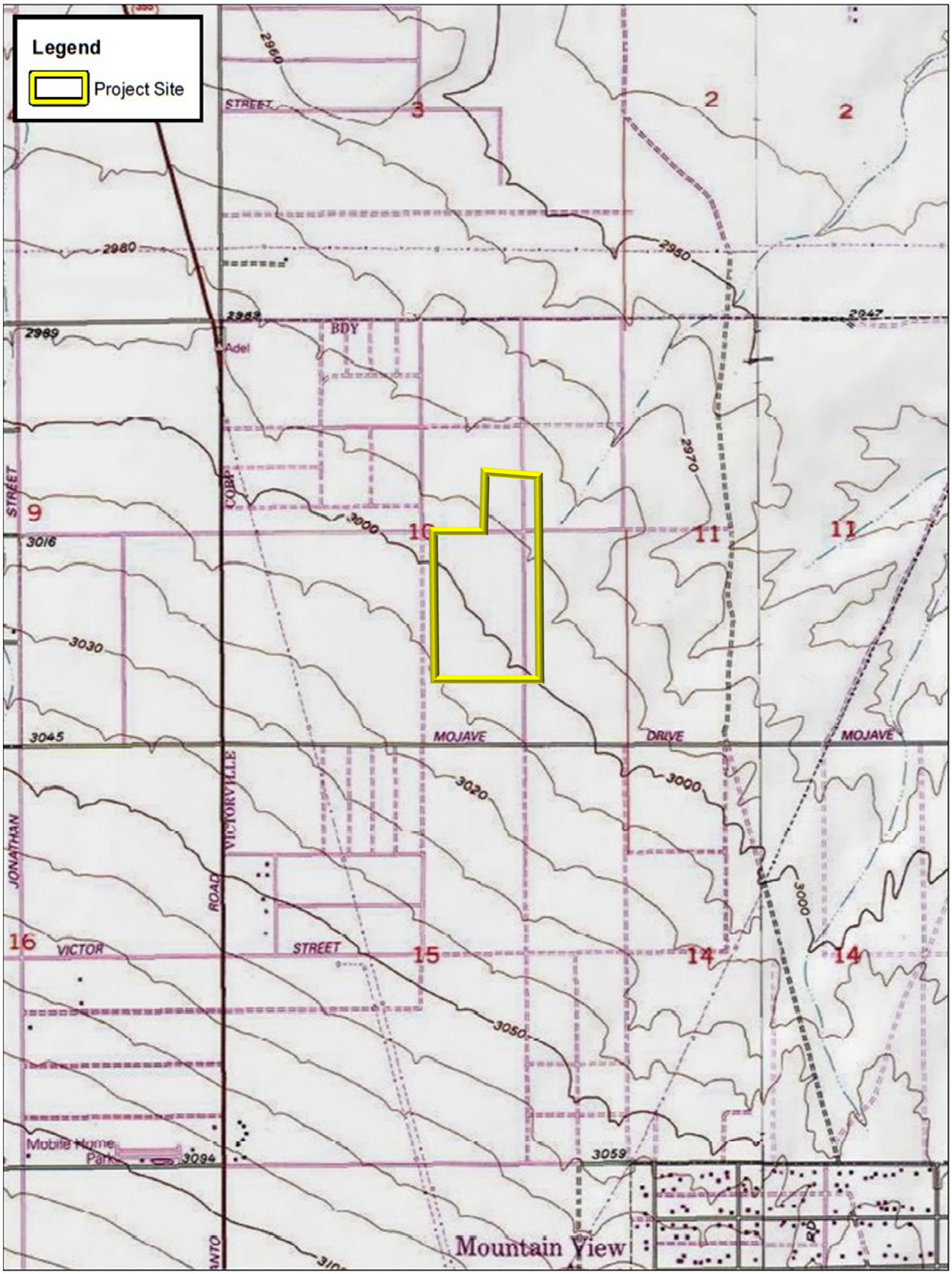


Attachment 2: Soil Map of Proposed Project Site



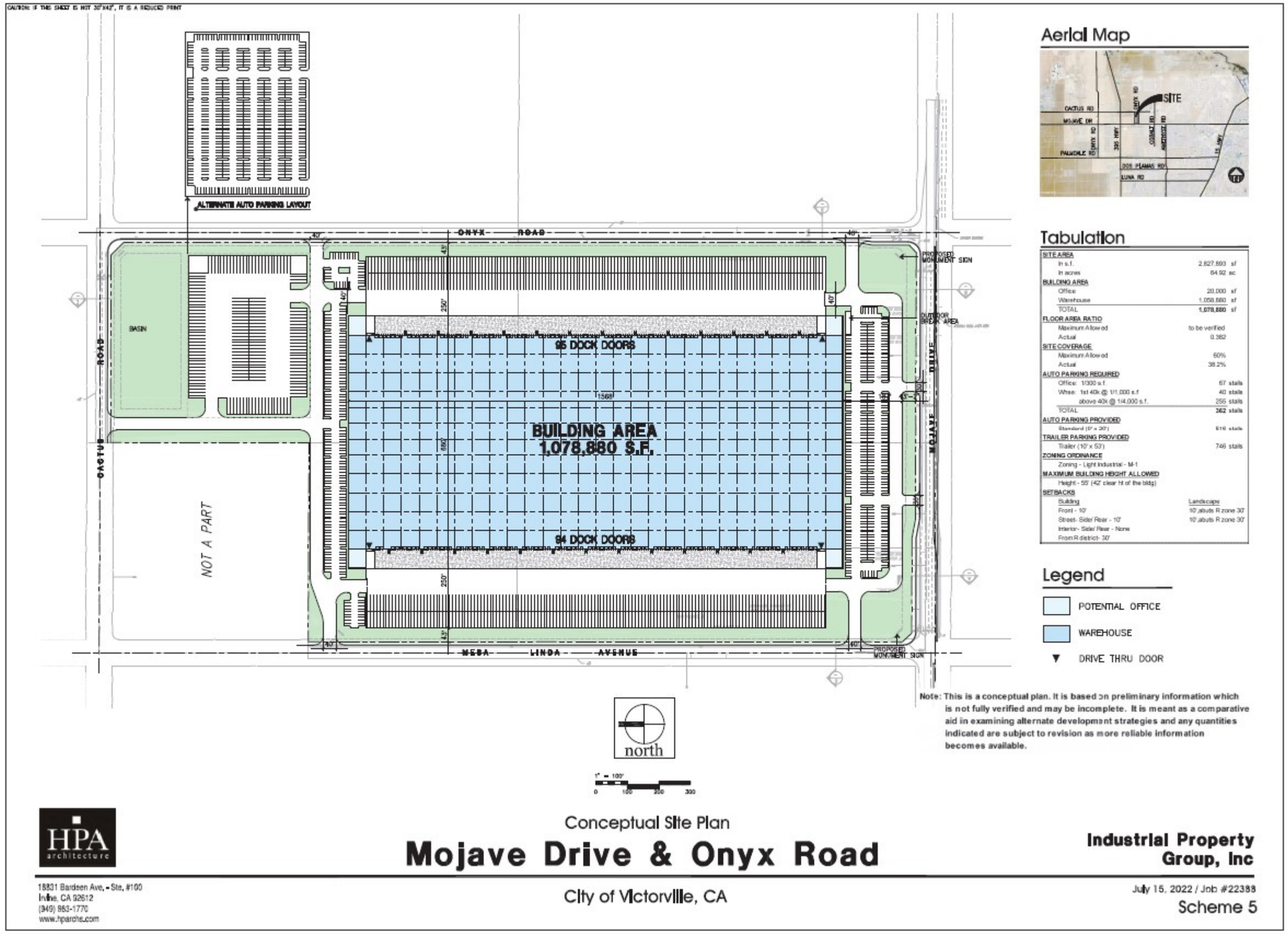
Attachment 3: Vegetation Map

Attachment 4: Topographic Map

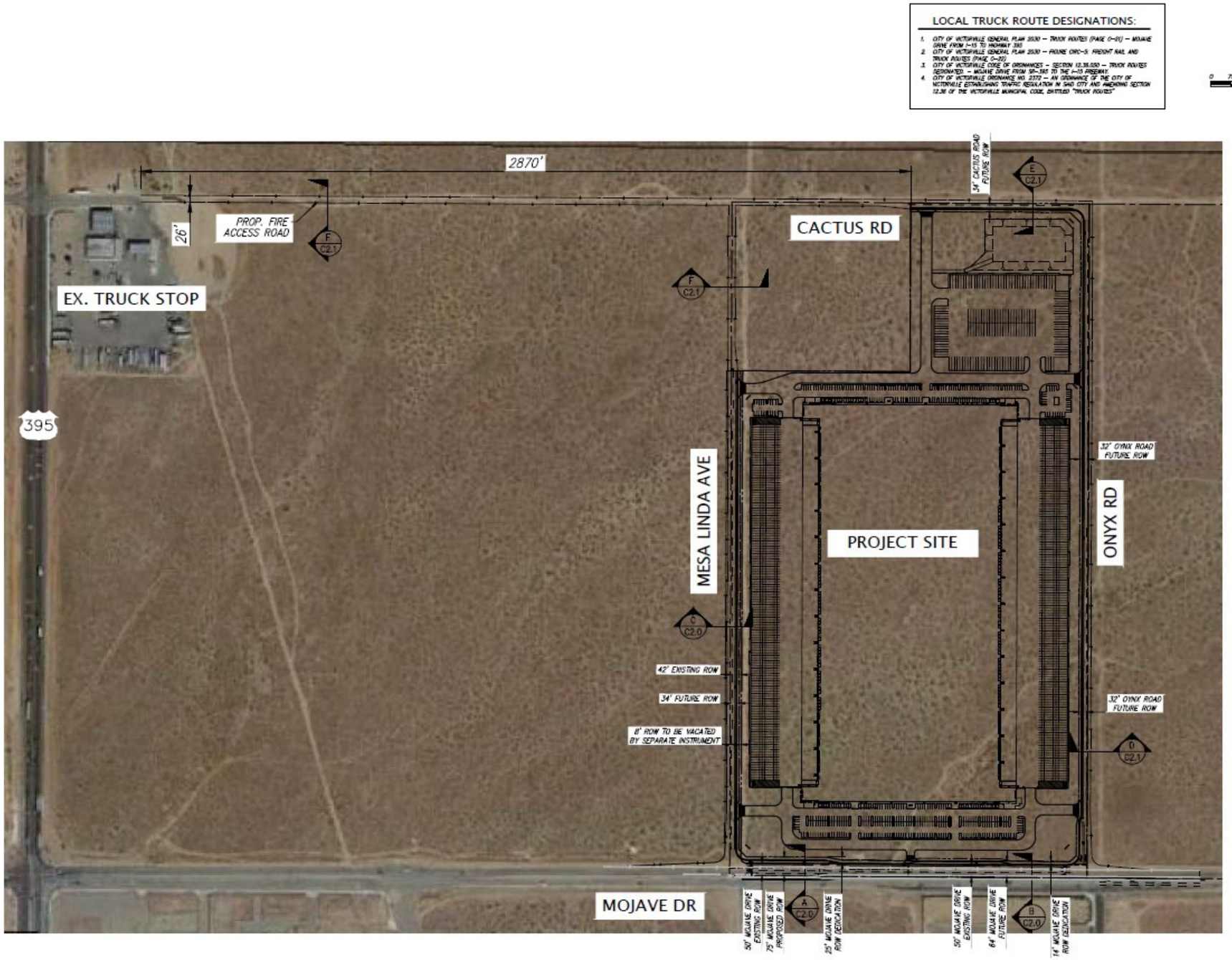


Attachment 5: Project Layout with Proposed Water and Sewer Line Installation

Attachment 6: Project Layout



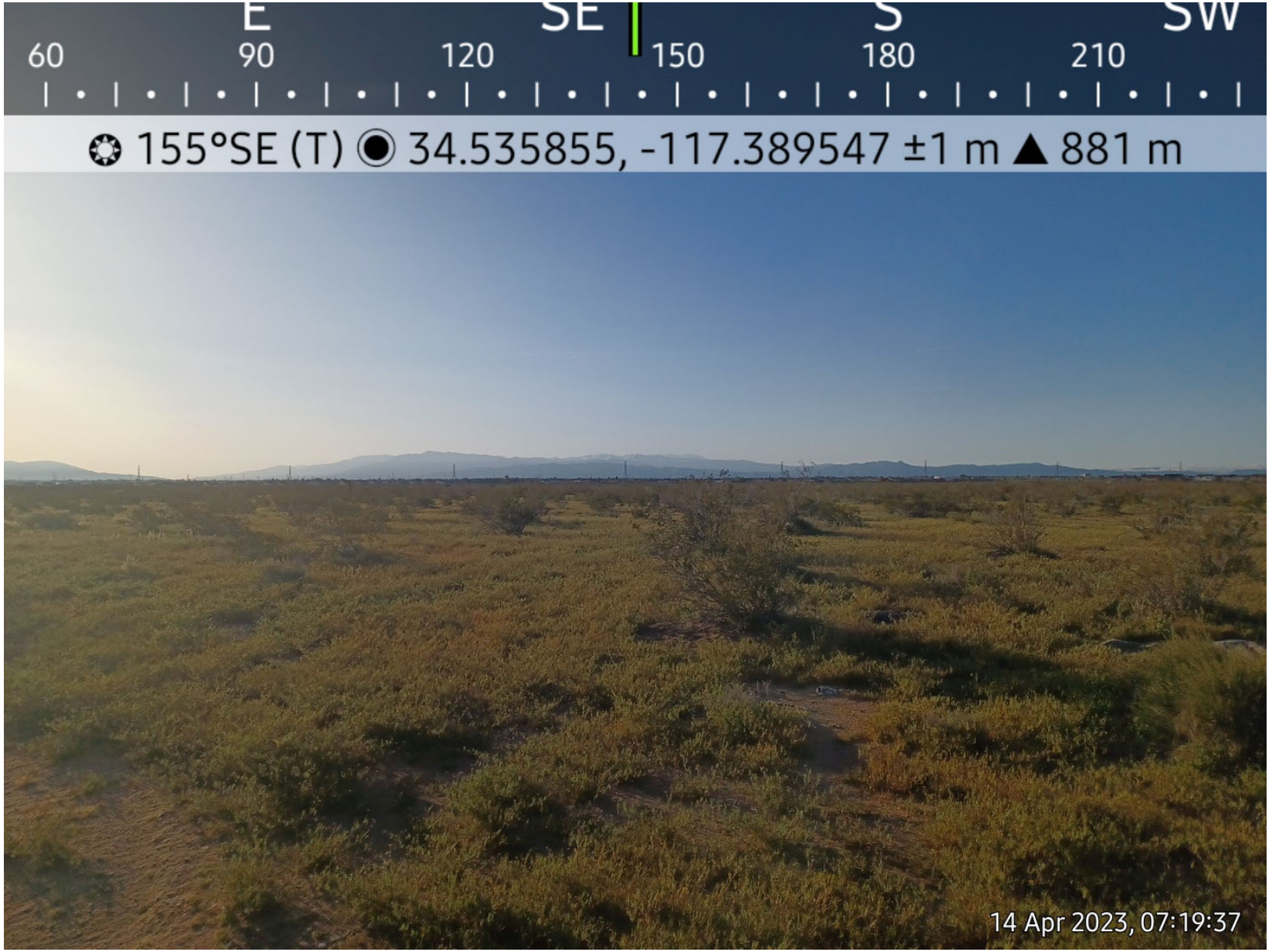
Attachment 7: Proposed Emergency Access Road



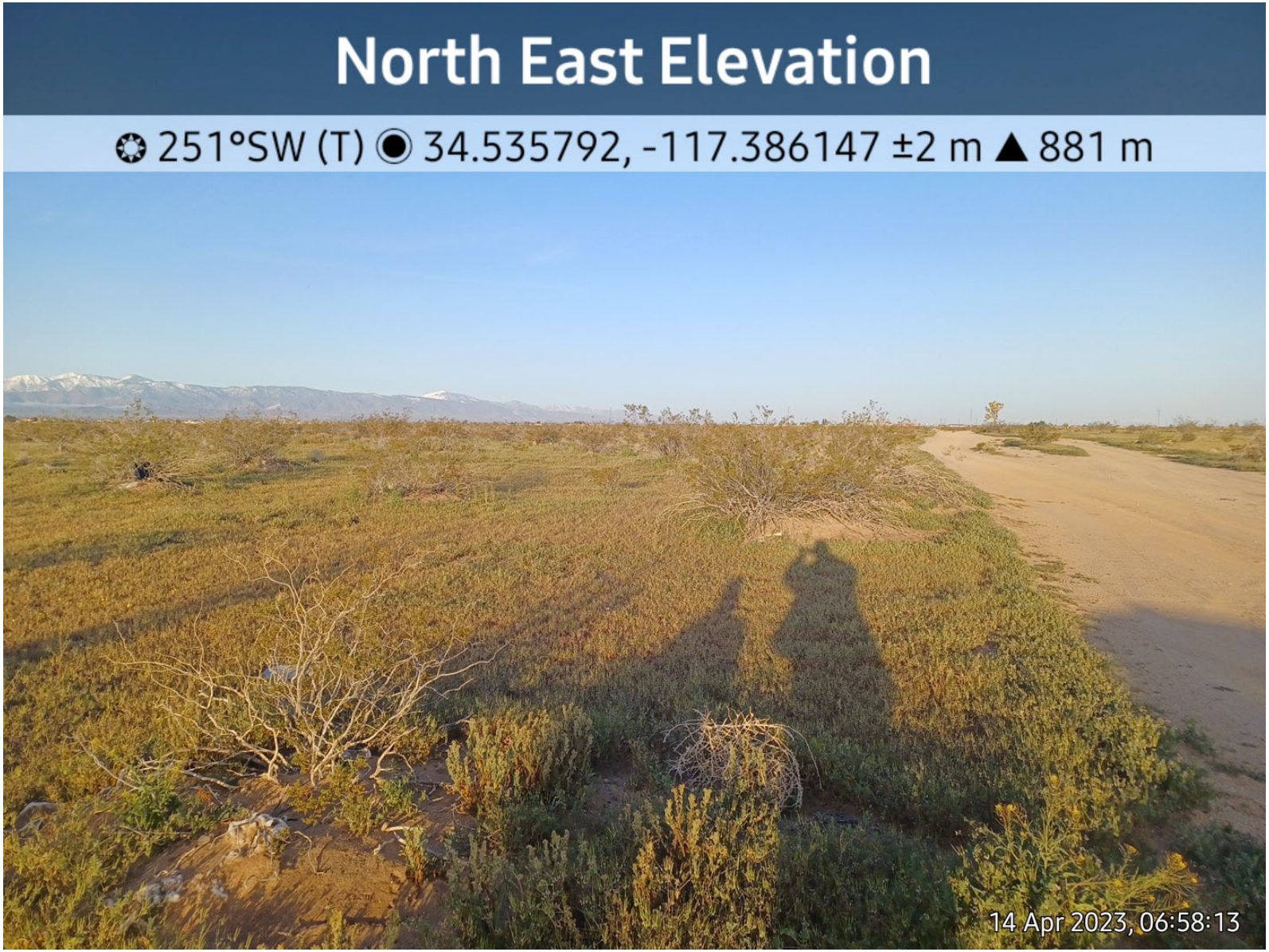
Attachment 8: Site Photos

North center of the site facing south toward the site.

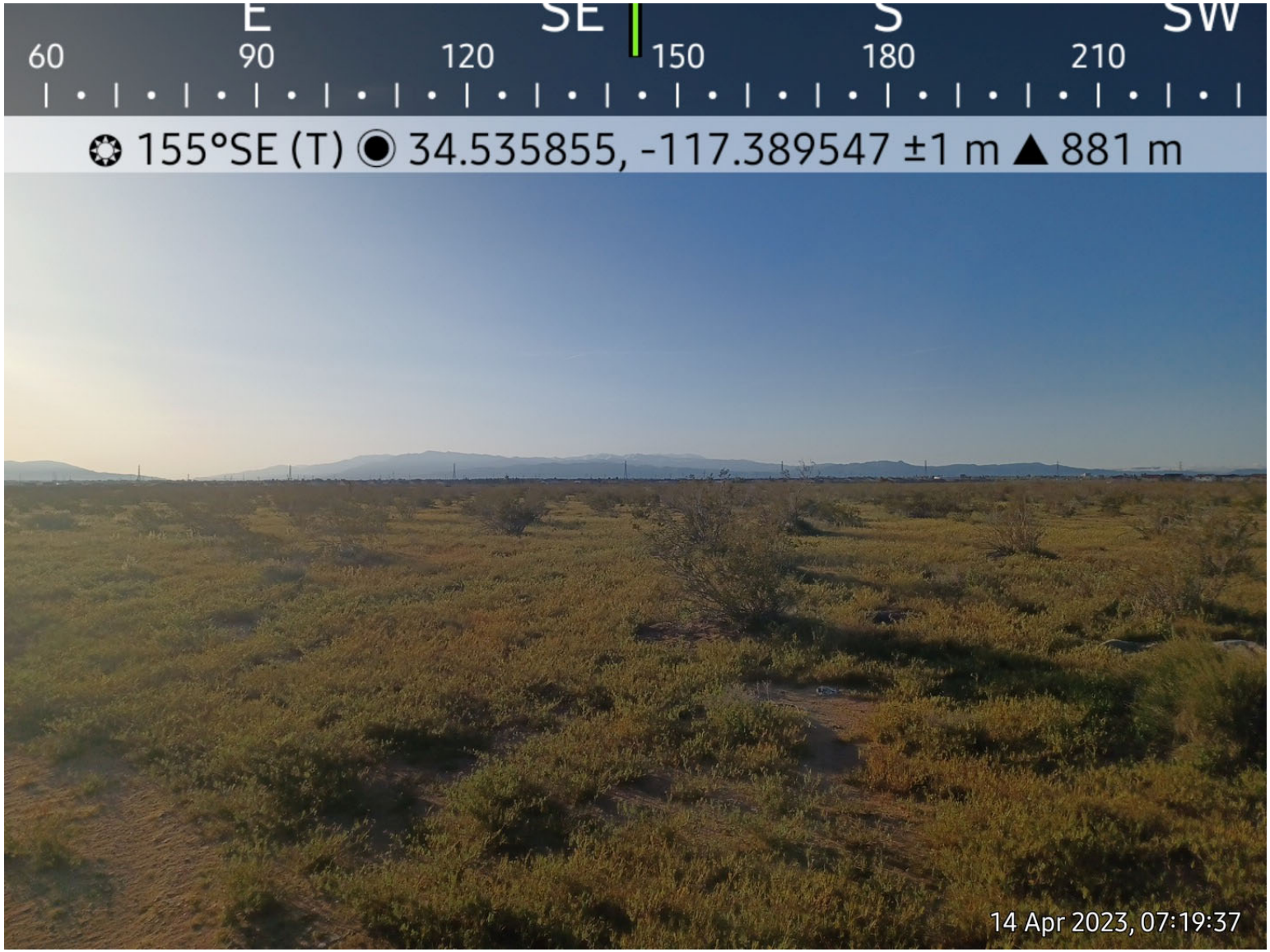
Northwest corner facing southeast toward the center of site.



Northeast corner facing southwest (Cactus Road shown on right; proposed Emergency Access Road).

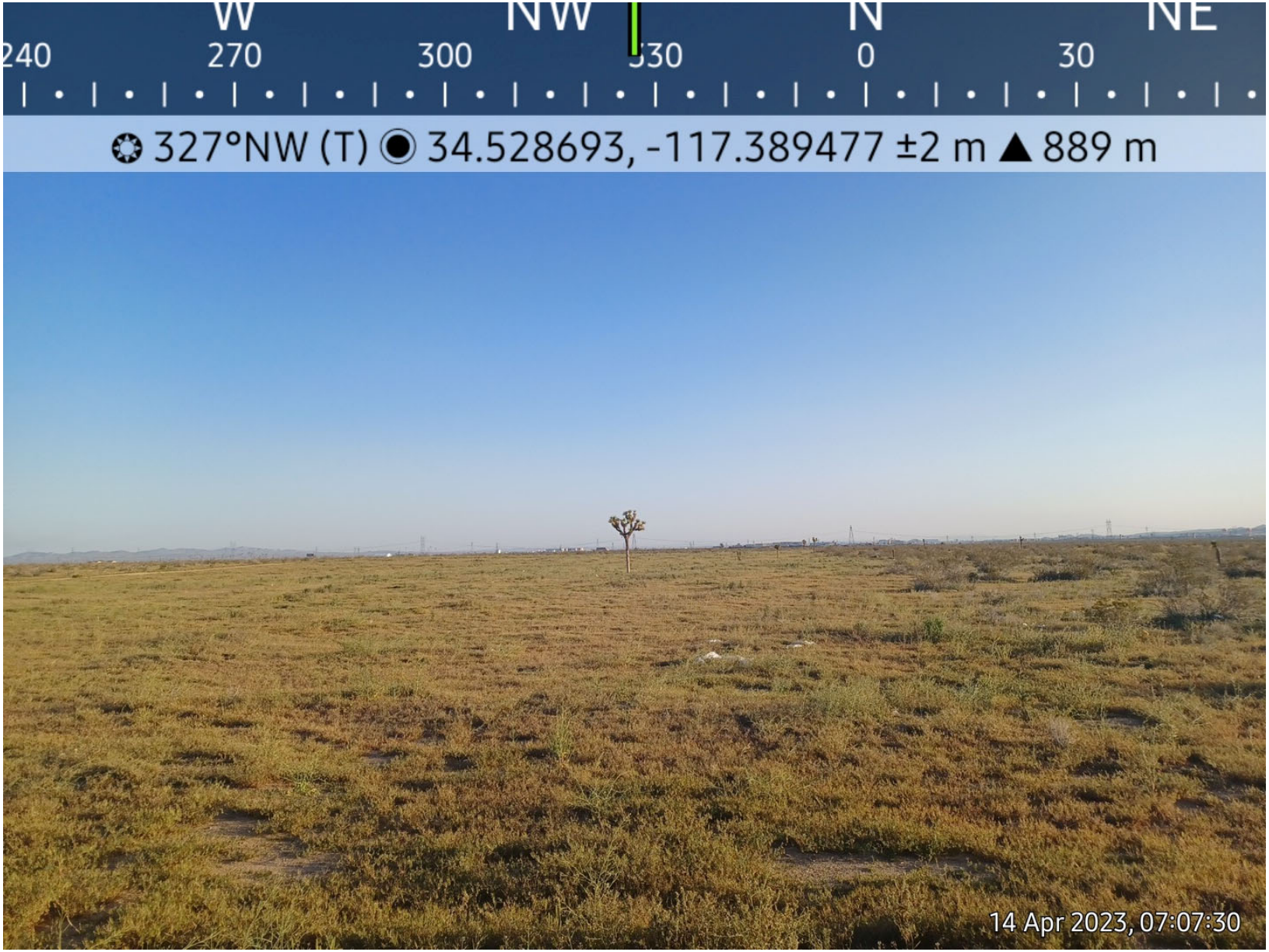


Northwest corner facing southeast.

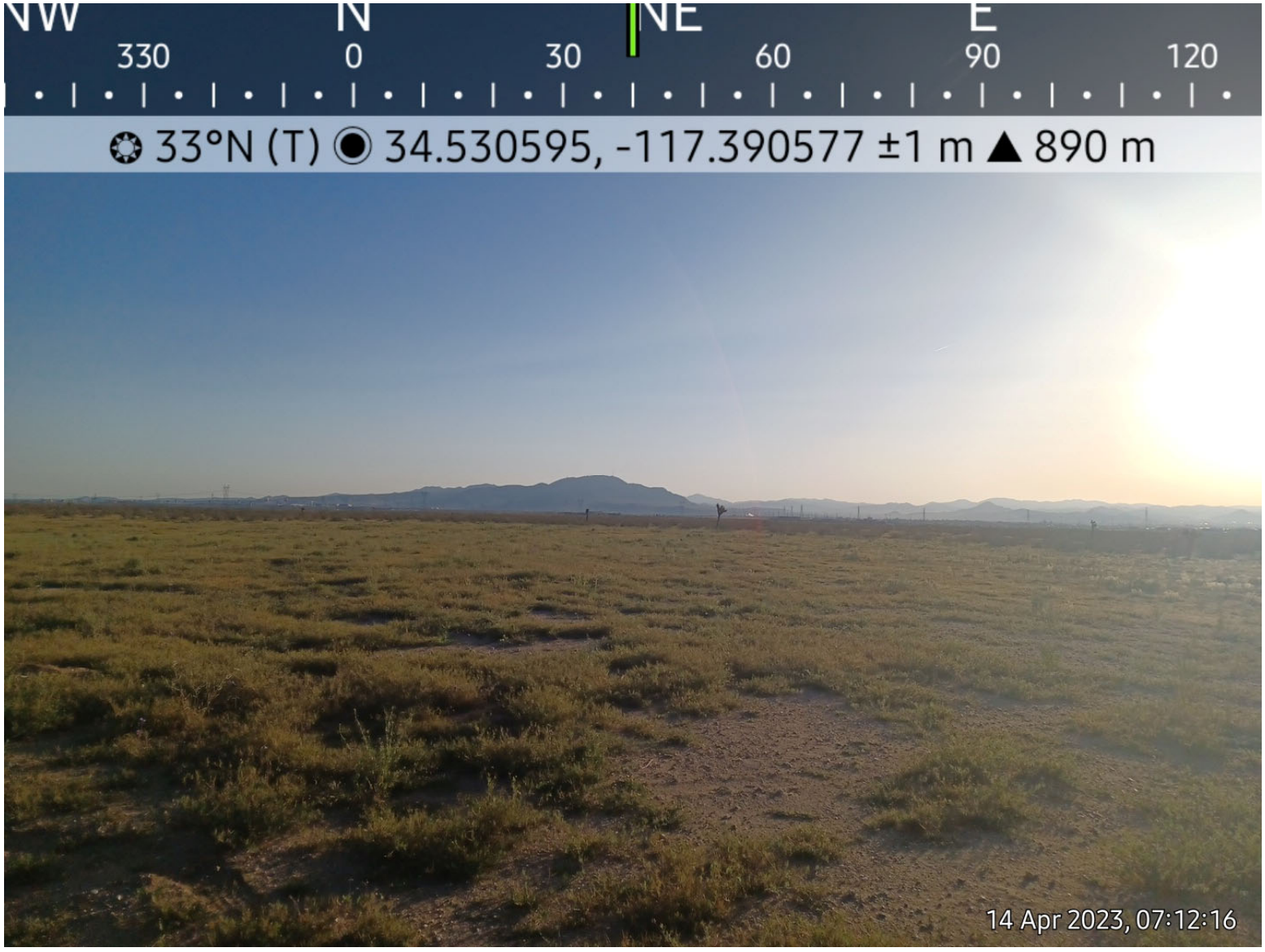


Southeast corner facing west. Mojave Drive shown on right (proposed water line installation).

Southern property boundary, center, facing north toward the site.



Southwestern property boundary facing northeast

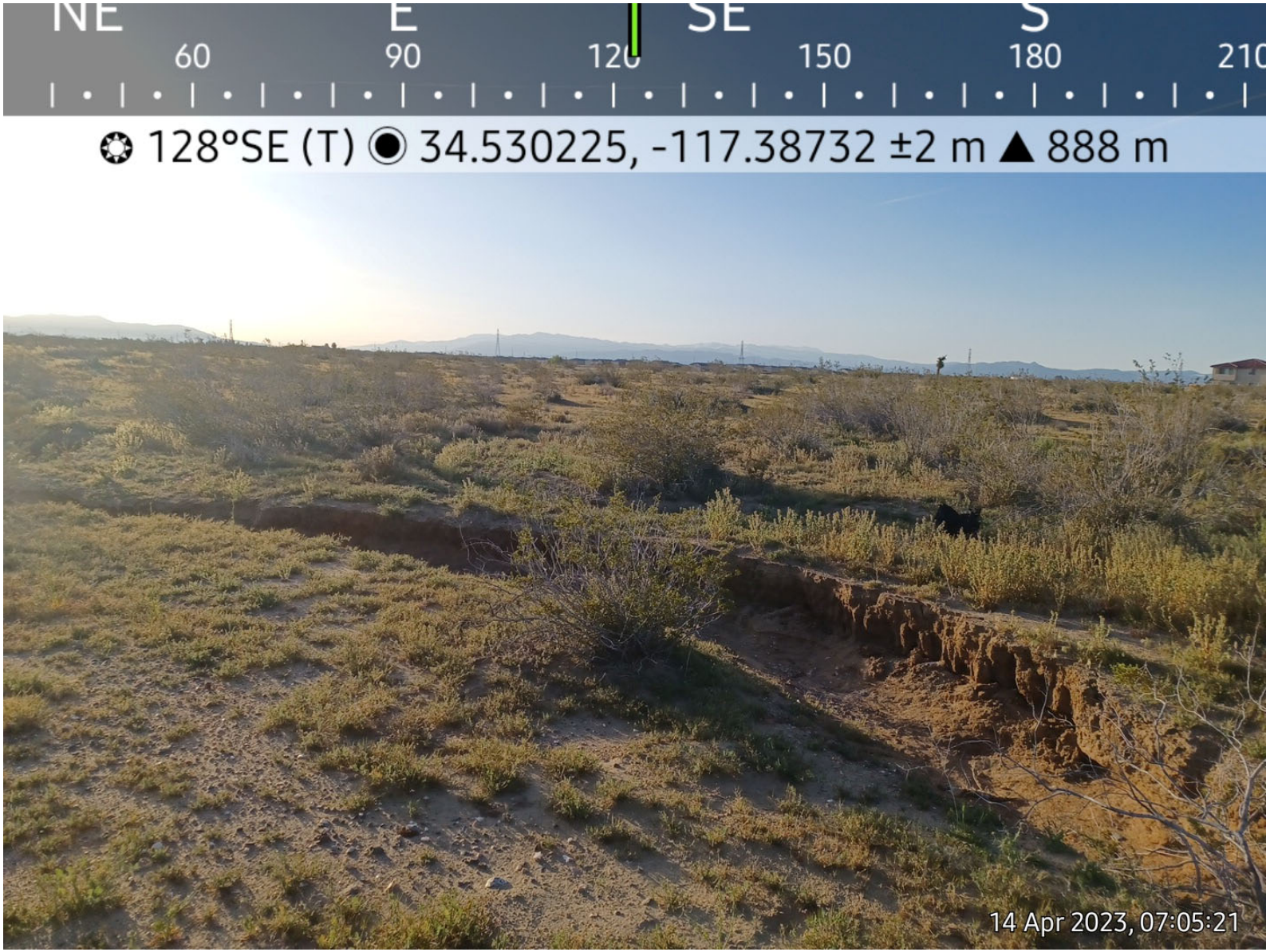


Western Property boundary, center, facing east toward the site.

Intermittent Drainage located at the southeastern quadrant of the project site, facing south.

May 24, 2023

Intermittent Drainage located at the southeastern quadrant of the project site, facing southeast.



May 24, 2023

Culverts located at the southern project boundary. Drainage flow conveys toward the northeast.

Collapsed ground squirrel burrow complex, located to the north west corner of the site. No signs of burrowing owl are present.

Coyote den (1) located to the center of the site. Signs of burrowing owl are present.

Coyote den (2) located to the center of the site. Signs of burrowing owl are present.

Alternative view of coyote den (2) located to the center of the site. Signs of burrowing owl are present.

Typical ground squirrel burrow.

May 24, 2023

Cactus Road facing east from the Project site toward Tawney Ridge Lane (Sewer Installation alignment).

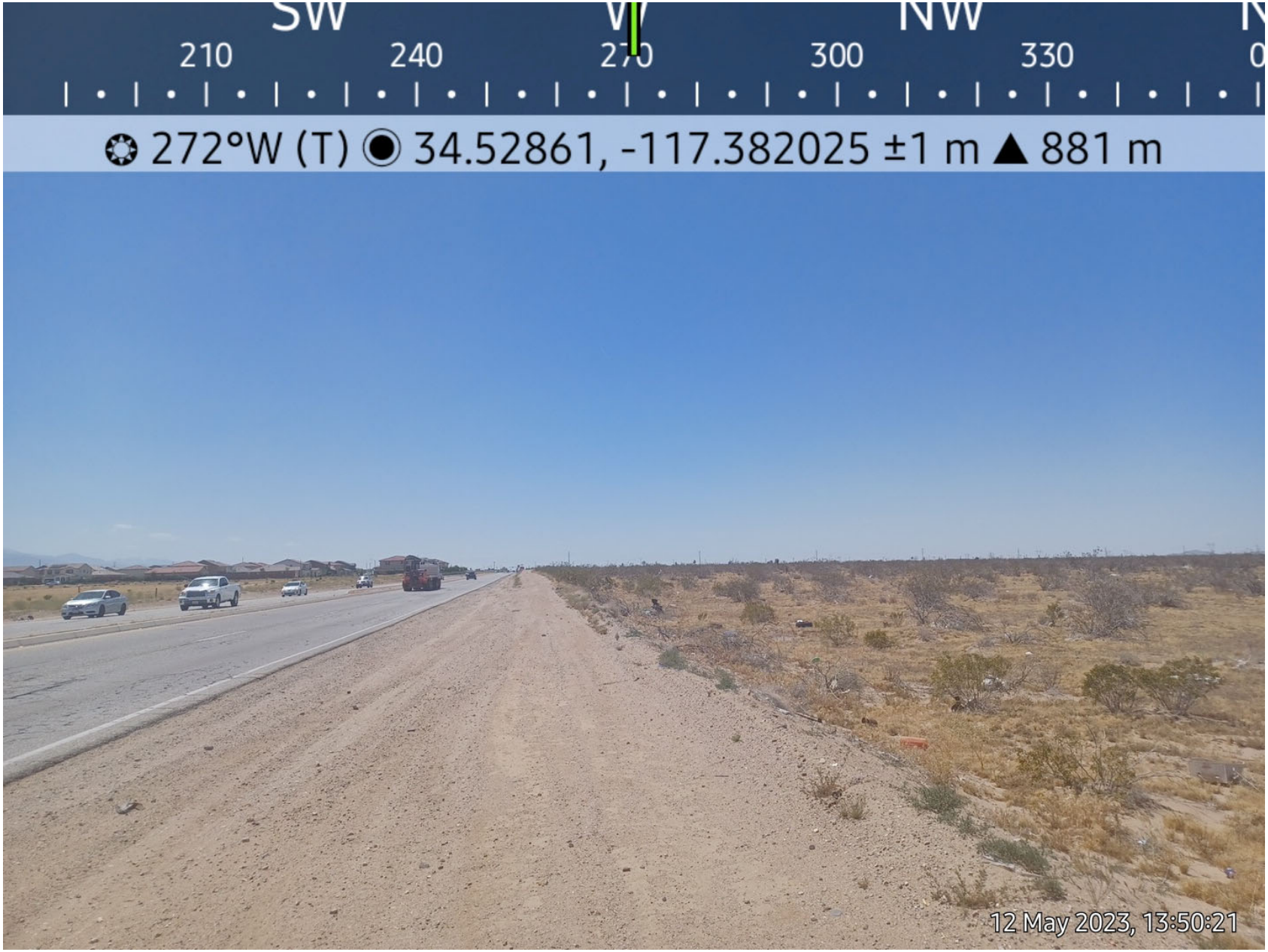
Onyx Road facing South.

Cactus Road facing East (Proposed Emergency Access Road)

May 24, 2023

Cactus Road facing West (Proposed Emergency Access Road)

Mojave Drive facing West (Proposed Water Line installation)



May 24, 2023

Cactus Road facing East (Proposed Sewer Line alignment)

May 24, 2023

Tawney Ridge Lane at Cactus Road.

May 24, 2023

Attachment 9: California Natural Diversity Database Records Search Results

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad Adelanto (3411754)

NEXUS ENVIRONMENTAL, LLC

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,880 3,200	2011 S:8	0	2	2	3	0	1	0	8	8	0	0
Buteo swainsoni Swainson's hawk	G5 S4	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	880 880	2561 S:1	0	0	0	0	1	0	1	0	0	1	0
Gopherus agassizii desert tortoise	G3 S2S3	Threatened Threatened	IUCN_CR-Critically Endangered	2,968 2,968	985 S:2	0	2	0	0	0	0	0	2	2	0	0
Toxostoma lecontei Le Conte's thrasher	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,790 2,835	238 S:4	0	0	0	0	0	4	4	0	4	0	0
Xerospermophilus mohavensis Mohave ground squirrel	G3 S2	None Threatened	BLM_S-Sensitive IUCN_NT-Near Threatened	2,520 2,980	432 S:3	0	0	1	0	0	2	1	2	3	0	0

Commercial Version -- Dated April, 30 2023 -- Biogeographic Data Branch

Report Printed on Friday, May 19, 2023

Page 1 of 1

Information Expires 10/30/2023

Attachment 10: Table of Special Status Plants and Wildlife with Potential to Occur at the Proposed Project Site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Accipiter Cooperii Coopers hawk	Fed: **END** CA: SSC	Found in mixed and deciduous forests, open and riparian woodlands, small, wooded lots, and forested mountain regions.	No	**Low** Suitable foraging habitat, but no suitable nesting opportunities.
Agelaius tricolor tricolored blackbird	Fed: **THR** CA: SSC	Prefers wetland and grassland habitats, wetlands, and active agricultural areas. Breeds and nests in marshes in cattails, bullrushes, and willows. Forages in irrigated pastures, dry rangeland.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Anaxyrus californica arroyo toad	Fed: None CA: WL	Found in low gradient, medium-to-large streams and rivers with intermittent and perennial flow in coastal and desert drainages from central California to Baja California, Mexico. Require exposed sandy streamsides with stable terraces for burrowing, and scattered vegetation.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aquila chyrsaetos golden eagle	Fed: None CA: FP/WL	Hunts over marshes and along rivers. Generally found in open mountain areas, foothills, plains, and open country like tundra, prairie, rangeland, and desert.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: THR	Forages in mud flats and along the edges of lakes, large marshes, shallow coastal lagoons and estuaries, and rivers in wooded areas. Usually nests in trees or shrubs, often near water, sometimes in thickets and lower in marshes and ponds.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Ardea herodias great blue heron	Fed: None CA: None	Found in both saltwater and freshwater habitats from open coasts, marshes, sloughs, riverbanks, and lakes. Forages in grasslands and agricultural fields, as well as backyard goldfish ponds. Nests in trees.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Present** Burrowing owl was observed on the site on January 31, 2023. Two active mammal burrows were identified on site, which provide potential foraging opportunity for BUOW. However, these burrows do not support nesting due to copius canid signs; In addition, adjacent and surrounding development supports tall structures that provide perching opportunities for predators of burrowing owls.
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: None CA: SSC	Resides in coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland habitats. Prefers rocky/gravely areas with yucca overstory and in desert scrub environments near or in the pine-juniper belt.	No	**Low** Suitable foraging and nesting opportunities occur on-site.

Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: None CA: WL	Found in low-to-moderate-elevation forests lining the rivers and streams of the western United States. Cottonwood (*Populus* spp.) and willow (*Salix* spp.) forests are most often used. Require relatively large contiguous patches of riparian habitat for nesting. Winter in woody, lowland vegetation near freshwater sources.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Contopus cooperi olive-sided flycatcher	Fed: DL CA: FP	Breed mostly in boreal forest and western coniferous forests from sea level to over 10,000 feet. Found frequently in burned forests and other open areas like forest edges, meadows, and ponds with an abundance of insects.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
orynorhinus townsendii Townsends big-eared bat	Fed: None CA: None	Found in pine forests, native prairies, riparian communities, active agricultural areas, coastal, and arid desert scrub habitats. Prefer large open areas for roosting. Elevation ranges from sea level to over 10,000 feet.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: **THR**	Can be found in bushes, willow thickets, brushy fields, and upland copses. Breeds in thickets of deciduous trees and shrubs, especially in willows or along woodland edges. Common near streams or marshes, but may be found in drier habitats as well.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: None CA: SSC	Requires moist microclimatic and vegetative conditions. Breeds only in dense riparian vegetation near surface water or saturated soil. Frequently nests in nonnative tamarisk (*Tamarix* spp.), as well as willow (*Salix* spp.).	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Emys marmorata western pond turtle	Fed: None CA: SSC	Found in permanent and intermittent waters of rivers, creeks, small lakes and ponds, marshes, irrigation ditches, and reservoirs. Basks on land or near water on logs, branches or boulders.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Low** Suitable foraging habitat is present on-site; no suitable nesting habitat is present within or adjacent to the site.
Falco peregrinus anatum American peregrine falcon	Fed: None CA: SSC	Found in wide variety of open habitats, from tundra to desert mountains. Often near water, especially along coast. Migrants may fly far out to sea. Often found in cities, nesting on building ledges and feeding on pigeons.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Gopherus agassizii Mojave desert tortoise	Fed: **THR** CA: **THR**	Occurs in desert scrub, desert wash, and Joshua tree habitats with friable, sandy, well-drained soils for nest and burrow construction. Highest densities occur in creosote bush scrub with extensive annual wildflower blooms and succulents with little to no non- native plant species.	No	**Presumed Absent** No desert tortoises, sign, or burrows were observed during the habitat assessment. Marginal habitat is present within the project site; however, the majority of the site is too densely vegetated for this species. In addition, adjacent and surrounding development has fragmented habitats in the vicinity of the site and excluded the site from more suitable areas.

Helminthoglypta mohaveana Victorville shoulderband	Fed: None CA: None	Only known to occur in the Mojave Desert near Victorville in San Bernadino County.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Lives in thickets and along other dense, regrowing areas such as bramble bushes, clearcut areas, powerline corridors, and shrubs along streams. Can sometimes be found in overgrown pastures and in margins of woodlands. Winters in open scrub and woodland edges in lowland areas.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper, desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	No	**Low** Limited foraging habitat is present within the project site. Suitable nesting habitat occurs nearby.
Lasionycteris noctivagans silver-haired bat	Fed: None CA: SSC	Found primarily in forested habitats at lower elevations to over 3,600 feet. Seeks shelter in loose bark, dead trees, snags, and inside hollow tree cavities, and cliff faces. Common in coniferous, mixed coniferous, and deciduous forests, especially old-growth areas. Forages in disturbed areas, small clearings, and along roadways and waterways.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lasiurus cinereus hoary bat	Fed: None CA: SSC	Habitat varies nationwide, but lives in arid regions of the Southwest. Can be found wintering along the coast.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Microtus californicus mohavensis Mojave river vole	Fed: None CA: **END**	Prefers habitat that is moist, including meadows, freshwater marshes, and irrigated pastures in locations surrounding the Mojave River between elevations of 2,460 to 2,700 feet.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Falco peregrinus anatum American peregrine falcon	Fed: None CA: SSC	Found in wide variety of open habitats, from tundra to desert mountains. Often near water, especially along coast. Migrants may fly far out to sea. Often found in cities, nesting on building ledges and feeding on pigeons.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Myotis ciliolabrum western small-footed myotis	Fed: **END** CA: **END**	Found in mesic and arid conifer forests around rocky outcrops, talus, clay banks, and riparian woodland. Can sometimes be found roosting in loose bark, buildings, bridges, caves, and mines. Prefers being near a source of water with a large insect population.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Myotis yumanensis Yuma myotis	Fed: None CA: SSC	Resides in moist and dry forests, riparian zones, grasslands, shrubsteppe, and deserts. Closely associated with rivers, streams, ponds, and lakes.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Nannoopterum auritum double-crested cormorant	Fed: CA: **END** **END**	Can be found along coasts, bays, in lakes and rivers, and larger open bodies of water. Nests on rocky islands and shores, or in trees and sea cliffs over water.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Piranga rubra summer tanager	Fed: None CA: None	Breeds in open spaces of woodlands and forest edges. Prefers oaks and riparian woodlands of cottonwood and willow.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Plebulina emigdionis San Emigdio blue butterfly	Fed: None CA: None	Resides in shadscale scrub in desert canyons and near washes. Found only from Inyo County through the Mojave Desert, San Joaquin Valley, Bouquet and Mint Canyons, and Los Angeles County. Reliant on four-wing saltbush (*Atriplex canescens*) as obligate larval host plant.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pseudocopaeodes eunus eunus alkali skipper	Fed: None CA: SSC	Found in salty desert habitats within grassy spots on alkali flats.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC	Found in any open country in the Southwest, including arid scrublands, farmlands, deserts, parks, and canyon mouths. Sometimes winters along the coastlines. Reliant on stream corridors within scrub ecosystems, in areas where willow, sycamore, cottonwood, mesquite, and other bottomland trees grow. Nests along stream corridors.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: None CA: SSC	Common in wooded areas adjacent to streams. Breeds in aquatic habitats including pools and backwaters within streams, creeks, ponds, marshes, sag and dune ponds, and lagoons. Can also breed within artificial environments, such as stock ponds.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Setophaga petechia yellow warbler	Fed: None CA: THR	Found in bushes, swamp edges, streams, and gardens. Breeds in second-growth woods, orchards, roadside thickets, and along the edges of lakes, swamps and marshes. Nests in small trees or bushes.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Siphateles bicolor mohavensis Mohave tui chub	Fed: None SSC CA:	The only fish native to the Mojave River. Restricted from the base of the San Bernadino Mountains to Soda Dry Lake. Requires slow-moving alkali waters with an abundance of aquatic vegetation. Can be found in deep pools or shallower out-flow streams.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Spinus lawrencii Lawrence's goldfinch	Fed: None CA: None	Breeds in a variety of habitats including streamside trees, oak woodland, open pine woodland, pinyon juniper woods, and chaparral. Often found close to water in dry country. Migrates and winters in weedy fields, farmland, bushy areas, and stream sides.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Thamnophis hammondii two-striped gartersnake	Fed: None CA: None	Found near or in permanent sources of fresh water. Common around streams with rocky beds bordered by willows and other riparian vegetation, including mountain slopes and desert oases. Feeds primarily on fish and amphibians.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Toxostoma bendirei Bendire's thrasher	Fed: None CA: None	Prefers relatively open grassland, shrubland, or woodland with scattered trees or shrubs for breeding. Generally found in brushy habitats in deserts or grasslands, and Joshua tree stands.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Vireo bellii pusillus least Bell's vireo	Fed: None CA: SSC	Commonly found in lowland riparian vegetation throughout most of California. Can be found along foothill streams in the desert as well. Winters in southern Baja California, Mexico among mesquite scrub habitats within arroyos, palm groves, and hedgerows boarding agricultural and residential areas.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Setophaga petechia yellow warbler	Fed: None CA: THR	Found in bushes, swamp edges, streams, and gardens. Breeds in second-growth woods, orchards, roadside thickets, and along the edges of lakes, swamps and marshes. Nests in small trees or bushes.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Breeds and roosts in freshwater wetlands with dense, emergent vegetation such as cattails. Often forages in fields, and winters in large, open agricultural areas. Nests in reeds directly over the water.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Xerospermophilus mohavensis Mohave ground squirrel	Fed: None CA: **THR**	Restricted to the Mojave Desert in open desert scrub, alkali desert scrub, annual grassland, and Joshua tree woodland. Prefers sandy to gravelly soils and tends to avoid rocky areas. Occurs sympatrically with the white-tailed antelope squirrel.	No	**Low** Suitable foraging and burrowing habitat are present within the project site. Based on surrounding development and known distributions and occurrences, this species is likely precluded from the site.
Special-Status Plant Species				
Canbya candida white pygmy-poppy	Fed: None CA: None CNPS: 4.2	Occurs on gravelly, sandy, granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 2,297 to 5,249 feet above mean sea level (msl). Blooming period is from March to June.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Chorizanthe spinosa Mojave spineflower	Fed: None CA: None CNPS: 4.2	Grows in alkaline or non-alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas. Found at elevations ranging from 20 to 4,265 feet. Blooming period is from March to July.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Diplacus mohavensis Mojave monkeyflower	Fed: None CA: None CNPS: 1B.2	Found only in the Mojave Desert, growing in sandy or gravelly habitat along hillsides and slopes, limestone, granite, and fine gravel in wash bottoms and edges. Grows at elevations of 1,968 to 3,280 feet. Blooms from April to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Eremothera boothii* ssp. *boothii Booth's evening-primrose	Fed: None CA: None CNPS: 2B.3	Can be found in sagebrush desert on dry rocky slopes, loose soils, sand or ash, and sometimes along roadsides from low desert plains to mountains and slopes at over 6,000 feet. Blooms from February to August.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Loeflingia squarrosa* var. *artemisiarum sagebrush loeflingia	Fed: None CA: None CNPS: 2B.2	Grows in sandy soils within desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. Blooming period is from April to May. Grows in elevation from 2,297 to 5,299 feet.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lycium torreyi Torrey's box-thorn	Fed: None CA: None CNPS: 4.2	Common within coastal sage scrub communities on coastal bluffs, but also in low, sparse, saline desert areas. Requires fine, silty, alluvial soils. Blooms from March to May but can fruit from June to September.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Muilla coronata crowned muilla	Fed: None CA: None CNPS: 4.2	Found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Blooming period is from May to April. Grows in elevation from 2,198 to 6,430 feet.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pediomelum castoreum Beaver dam breadroot	Fed: None CA: None CNPS: 1B.2	Occurs in sandy soils, washes, and roadcuts within Joshua tree woodland and Mojavean desert scrub. Found at elevations ranging from 2,000 to 5,000 feet. Blooming period is from April to May.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the

				project site.
Sclerocactus polyancistrus Mojave fish-hook cactus	Fed: None CA: None CNPS: 1B.2	Grows in desert scrub, Joshua tree woodlands, hills, alluvial slopes, creosote-bush scrub, and canyons, often on limestone substrate. Blooms from April to June.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Scutellaria bolanderi ssp. austromontana Southern mountains skullcap	Fed: None CA: None CNPS: 4.2	Found throughout the mountain and coastal regions from Oregon to Baja California. Grows in gravelly soils, stream banks, forest and woodland habitats of oak or pine. Prefers open areas, often those cleared by fire. Blooms from June to August.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Symphyotrichum defoliatum San Bernadino aster	Fed: None CA: None CNPS: 4.2	Grows in grassland and meadow habitats, as well as disturbed areas. Prefers freshwater-marsh habitat in freshwater wetland, coastal sage scrub, or southern oak woodland communities. Blooms from July to November.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Yucca brevifolia western Joshua tree	Fed: None CA: CE CNPS: N/A	Occurs in a variety of arid habitats within the Mojave Desert. Found at elevations ranging from 1,600 to 6,600 feet. Blooming period is from March to June.	Yes	**Present** 30 Joshua trees were documented onsite.

U.S. Fish and Wildlife Service (Fed) - Federal
END – Federal Endangered THR – Federal Threatened DL - Delisted

California Department of Fish and Wildlife (CA) - California
END – California Endangered THR – California Threatened
threatened in California
0.3- Not very threatened in California
CTHR – California Candidate Threatened
DL - Delisted
FP – California Fully Protected
SSC – California Species of Special Concern
WL – California Watch List
CE – Candidate Endangered

California Native Plant Society (CNPS) - California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
4 Plants of Limited Distribution – A Watch List
Threat Ranks
0.2- Moderately

Attachment 12: USFWS Desert Tortoise Survey Forms

Version: October 26, 2018

Date of survey: 05/12/2023 (day, month, year) Survey biologist(s): MICHAEL GRIMES, ELMER LIAMAS (name, email, and phone number)

Site description: IPG MOJAVE HOLDINGS LLC, VICTORVILLE CA (project name and size, general location)

County: SAN BERNARDINO Quad: ADELANTO Location: 464356.27mE, 3821239.16 mN (UTM coordinates, lat-long, and/or TRS; map datum)

Circle one: 100% coverage or Sampling Area size to be surveyed: 6.59 AC Transect #: ____ Transect length: ____

GPS Start-point: 464289.50mE, 3821648 mN, 915m (easting, northing, elevation in meters) Start time: 11:43 am/pm

GPS End-point: 464542.85mE, 3820840.39 mN 920m (easting, northing, elevation in meters) End time: 1:43 am/pm

Start Temp: 27.6 °C End Temp: 31.0 °C

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 ≥180 mm? (*Yes, No or Unknown*)	Existing tag # and color, if present
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, 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				

25 of 25

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

Version: October 26, 2018

Date of survey: 03/31/23 (day, month, year) Survey biologist(s): MICHAEL GRIMES, ELMER LLAMAS ROBERT WILLIAMS, DARIAN WONG, DANIEL SOLKOWITZ (name, email, and phone number)

Site description: IPG MOJAVE HOLDINGS LLC, VICTORVILLE, CA (project name and size; general location)

County: SAN BERNARDINO Quad: ADELANTO Location: 464356.27mE, 3821239.16mN (UTM coordinates, lat-long, and/or TRS; map datum)

Circle one: 100% coverage or Sampling Area size to be surveyed: 68 ACRES Transect #: ____ Transect length: _____

GPS Start-point: 464530.20mE, 3821630mN (easting, northing, elevation in meters) Start time: 9:00 am/pm

GPS End-point: 464299.87mE, 3821639.79mN (easting, northing, elevation in meters) End time: 10:53 am/pm

Start Temp: 11.7 °C End Temp: 13.9 °C

MG

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 ≥180 mm? (*Yes, No or Unknown*)	Existing tag # and color, if present
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, 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				