APPENDIX B
Biological Resources Documentation

Michael Baker
INTERNATIONAL

We Make a Difference

February 8, 2023 JN 192691

NorthPoint Development
Attention: Mr. Chandler Elliott
6010 West Amelia Earhart Drive
Salt Lake City, UT 84116

SUBJECT: Delineation of Jurisdictional Waters for the proposed Antelope Valley Logistics Center West (AVLC West) Development Project located in unincorporated County of Los Angeles, California

Dear Mr. Elliott:

This delineation was prepared for NorthPoint Development to delineate the U.S. Army Corps of Engineers' (Corps), Lahontan Regional Water Quality Control Board's (Regional Board), and California Department of Fish and Wildlife's (CDFW) jurisdictional authority within the proposed AVLC West Development Project. The proposed project is generally located north of West Avenue G, south of West Avenue F, west of Sierra Highway, and east of the Antelope Valley Freeway/State Route 14 (SR-14) north of the City of Lancaster and within the northern section of the unincorporated County of Los Angeles, California (*refer to Figures 1 and 2*). The fieldwork for this delineation was conducted on November 29, 2022.

Project Description and Location

The objective of the proposed AVLC West development project is to build a warehouse/logistics center. Two buildings with a total of approximately two million square feet of building area, within the westerly portion of the subject site. This memo addresses the anticipated jurisdictional limits of the project.

Summary of Regulations

There are four key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps and U.S. Environmental Protection Agency (EPA) jointly regulate activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. The CDFW regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-cologne Water Quality Control Act/State Wetland Definition and Procedures for Discharges of Dredged or Fill Material of Waters of the State.

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Site Conditions

The approximate 119-acre project site is located within Township 8 North Range 12 West Section 33 within the San Bernardino Base and Meridian. The project site consists of disturbed land on which there has been evidence of homeless encampments, illegal dumping, and off-road vehicle activity (*refer to Appendix A for Site Photographs*). Elevation in the project site ranges approximately 2,301 feet to 2,309 feet above mean sea level. Due to the disturbed nature of the site, no riparian vegetation, aquatic drainage features, or evidence of hydrology was observed during the site visit. According to the U.S. Geological Survey National Hydrography Dataset, the end of an unnamed ephemeral blue line drainage is present within the project's western footprint. While shown entering the project site's border, the blue line in fact terminates at the Antelope Valley Freeway/SR-14 and does not flow further east into the project area. Photo revisions of SR-14 are noted on the topographic map, and when constructed, flows that drain under the freeway are then collected in north/south drainage features. No ordinary high-water mark (OHWM), streambed, or other erosive evidence was noted on-site.

Conclusion and Recommendations

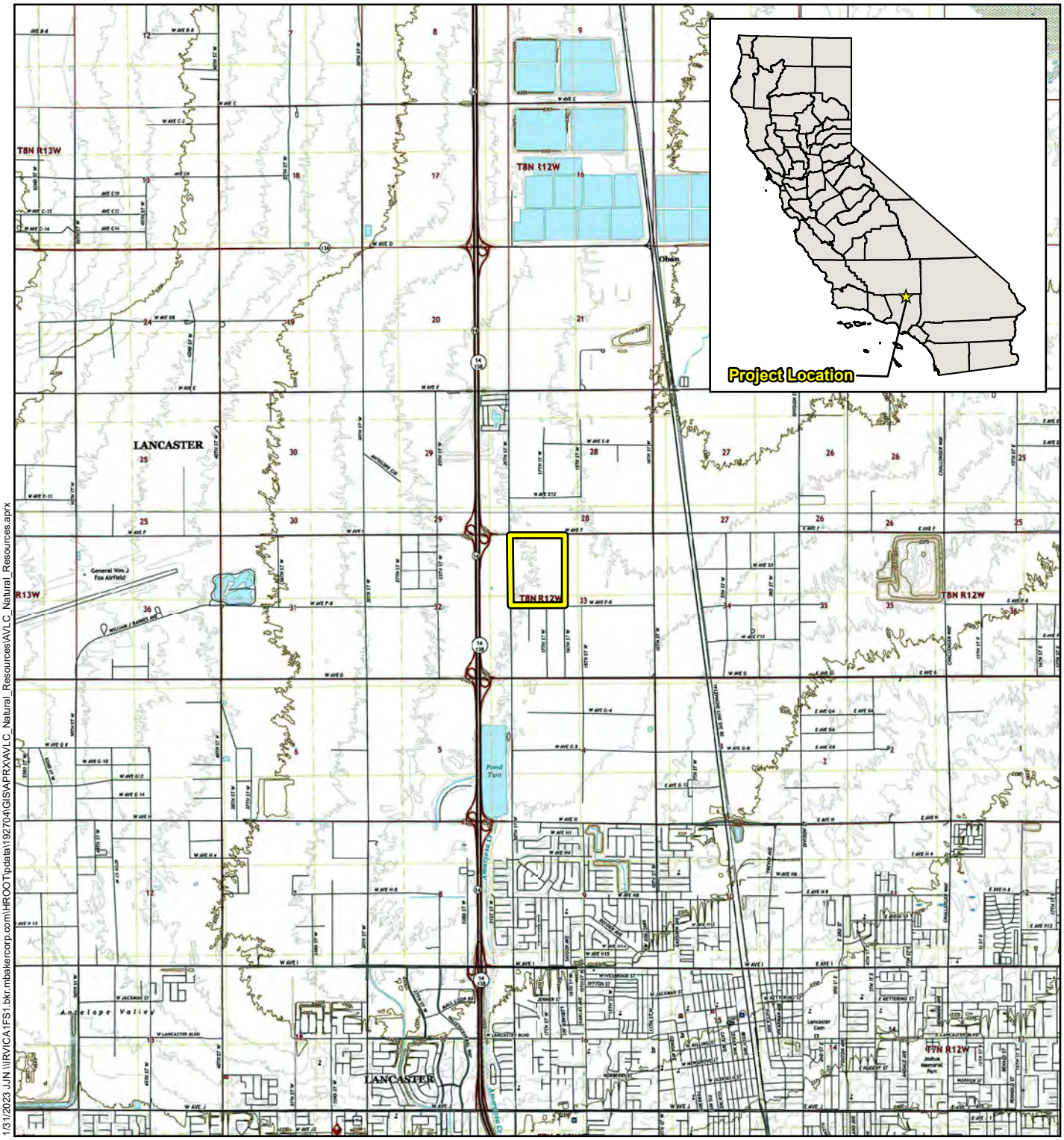
The project area appears to consist of uplands, typical of City of Lancaster and high desert environmental. At this time, no regulatory approvals would be anticipated due to the lack of jurisdiction within the property. This memorandum presents Michael Baker's best effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies; however, as with any jurisdictional delineation, only the regulatory agencies can make a final determination of jurisdiction.

Please contact me at (949) 855-3687 or at RBECK@mbakerintl.com with any questions you may have regarding this project.

Sincerely,

Richard Beck

Richard Beck, PWS, CEP, CPESC
Vice President
Planning and Environmental Sciences



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Michael Baker INTERNATIONAL

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Regional and Project Vicinity

Source: USGS 7.5-Minute topographic quadrangle maps: *Lancaster East, Lancaster West, Rosamond (2022), and Rosamond Lake (2021)*

Figure 1

2/1/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

Project Site (118.55 acres)

Reference Point

Michael Baker INTERNATIONAL

0 175 350 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

Figure 2

Photograph 1: Standing near northeast corner of the project site, facing southeast.

Photograph 2: Standing near the southwest corner of the project site, facing north.

Photograph 3: Standing in the center of the project site, facing south.

Photograph 4: Standing at 17th Street West and the middle of the south boundary of the project site, facing west.

Photograph 5: Standing at 17th Street West and the middle of the south boundary of the project site, facing northeast.

Photograph 6: Standing in southeast quadrant of the project site, facing east.

Photograph 7: Standing at northeast corner of the project site, facing west.

Photograph 8: Standing at 17th Street West and northern boundary of the project site, facing south.

ANTELOPE VALLEY LOGISTICS CENTER WEST PROJECT

UNINCORPORATED LOS ANGELES COUNTY, CALIFORNIA

Biological Resources Assessment

Prepared For:

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Prepared By:

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949.855.3687

April 2024
JN 192691

ANTELOPE VALLEY LOGISTICS CENTER-WEST PROJECT

UNINCORPORATED LOS ANGELES COUNTY, CALIFORNIA

Biological Resources Assessment

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

John R. Parent

John Parent
Biologist

Arthur Popp

Arthur Popp
Natural Resources Technical Manager

April 2024
JN 192691

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FIGURES

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

° F	degrees Fahrenheit
AMM	Avoidance and Minimization Measures
amsl	above mean sea level
APN	Assessor's Parcel Numbers
AVLC – West	Antelope Valley Logistics Center – West
BLM	Bureau of Land Management
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CIRP	California Inventory of Rare and Endangered Plants
CNDDB	California Natural Diversity Database RareFind 5
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	federal Clean Water Act
DETO	desert tortoise
FESA	federal Endangered Species Act
FE	federally Endangered
FP	Fully Protected
FT	federally Threatened
GIS	Geographic Information System
IPaC	Information for Planning and Consultation Project Planning Tool
MBTA	Migratory Bird Treaty Act
Michael Baker	Michael Baker International
MGS	Mohave ground squirrel
mph	miles per hour
project	Antelope Valley Logistics Center Project
PWS	Professional Wetland Scientist
RWQCB	Regional Water Quality Control Board
SE	State Endangered
SEA	Significant Ecological Area
SSC	Species of Special Concern
ST	State Threatened
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers

USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WEAP	Worker Environmental Awareness Program
WL	Watch List
WoS	waters of the State
WoUS	waters of the U.S.

Section 1 Introduction

This report contains the findings of Michael Baker International's (Michael Baker) biological resources assessment for the proposed Antelope Valley Logistics Center – West (AVLC - West) (project or project site). Michael Baker biologists conducted a general field survey/habitat assessment on November 21 and 29, 2022. Additional site visits were conducted in 2023 to conduct focused surveys for burrowing owl (*Athene cunicularia*) on March 8, March 28, May 9, June 5, and July 6, 2023, and for rare plants on May 1, May 23, and June 16, 2023. The field surveys were conducted to characterize existing site conditions and assess the potential for special-status[1] biological resources to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of habitats within the project site and their potential to support special-status biological resources that were identified during reviews of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CNDDB; CDFW 2023a), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2023), and the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation environmental review tool (IPaC; USFWS 2023a), and other databases as potentially occurring in the vicinity of the project site.

1.1 PROJECT LOCATION

The project site is generally located north of West Avenue G, east of Sierra Highway, south of West Avenue F, and west of State Route 14 in an unincorporated area of Los Angeles County, California (refer to Figure1, *Regional and Project Vicinity*). The project site is depicted in Section 33 of Township 8 North, Range 12 West, on the U.S. Geological Survey's (USGS) *Lancaster West*, *California* 7.5-minute quadrangle. The site encompasses approximately 119 acres (refer to Figure 2, *Project Site*).

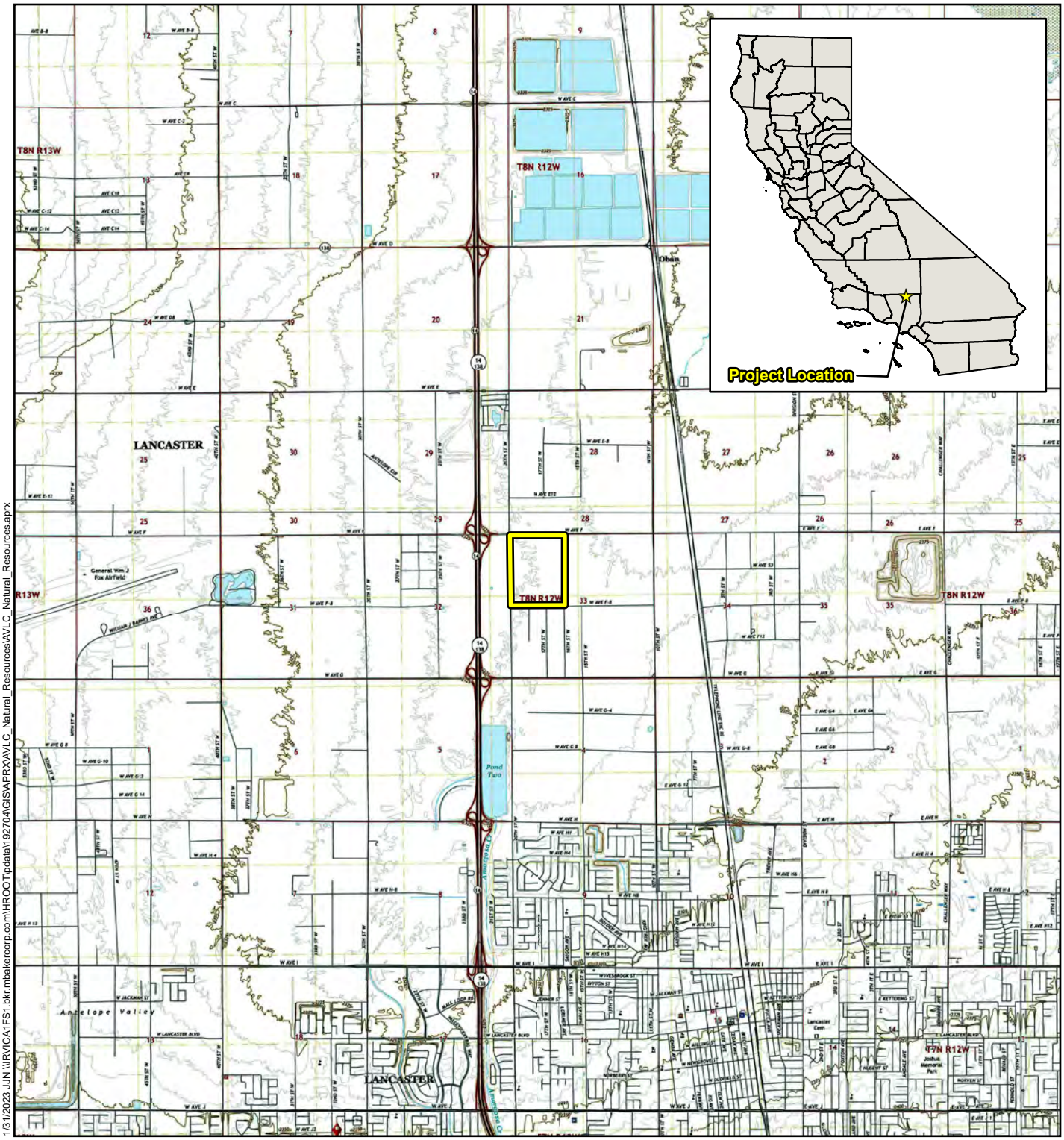
1.2 PROJECT DESCRIPTION

The proposed project would include construction of two speculative industrial warehouse buildings on approximately 121 acres. Each new building would consist of an approximate 1,004,000 square-foot footprint, which includes approximately 40,000 square feet of office space. Each building will have dedicated 82 truck loading docks, 222 trailer parking stalls, and 861 passenger vehicle parking spaces; refer to Exhibits 2-3, Conceptual Site Plan. The project applicant proposes to enhance the local economy and municipal revenue, and furnish local employment opportunities for residents, consistent with the goals of the Town & County Antelope Valley Area Plan.

To provide access to the project site, Avenue F would be partially improved along the northly property boundary in addition to partial improvements of 20th Street West along the westerly property boundary and Avenue F-8 along the southernly boundary and full improvements of a new proposed public road on the

[1] As used in this report, "special-status" refers to species that are either federally-/State-listed, proposed, or candidates; species that have been designated a California Rare Plant Rank by the California Native Plant Society; species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife; or State/locally rare vegetation communities.

east side of the property (refer to Figure 3, *Offsite Improvements*). Additional ancillary improvements such as landscaping and utility work would also be required and are included as part of the project.



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ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Regional and Project Vicinity

Source: USGS 7.5-Minute topographic quadrangle maps: *Lancaster East, Lancaster West, Rosamond (2022), and Rosamond Lake (2021)*

Figure 1

2/1/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

Project Site (118.55 acres)

Reference Point

Michael Baker INTERNATIONAL

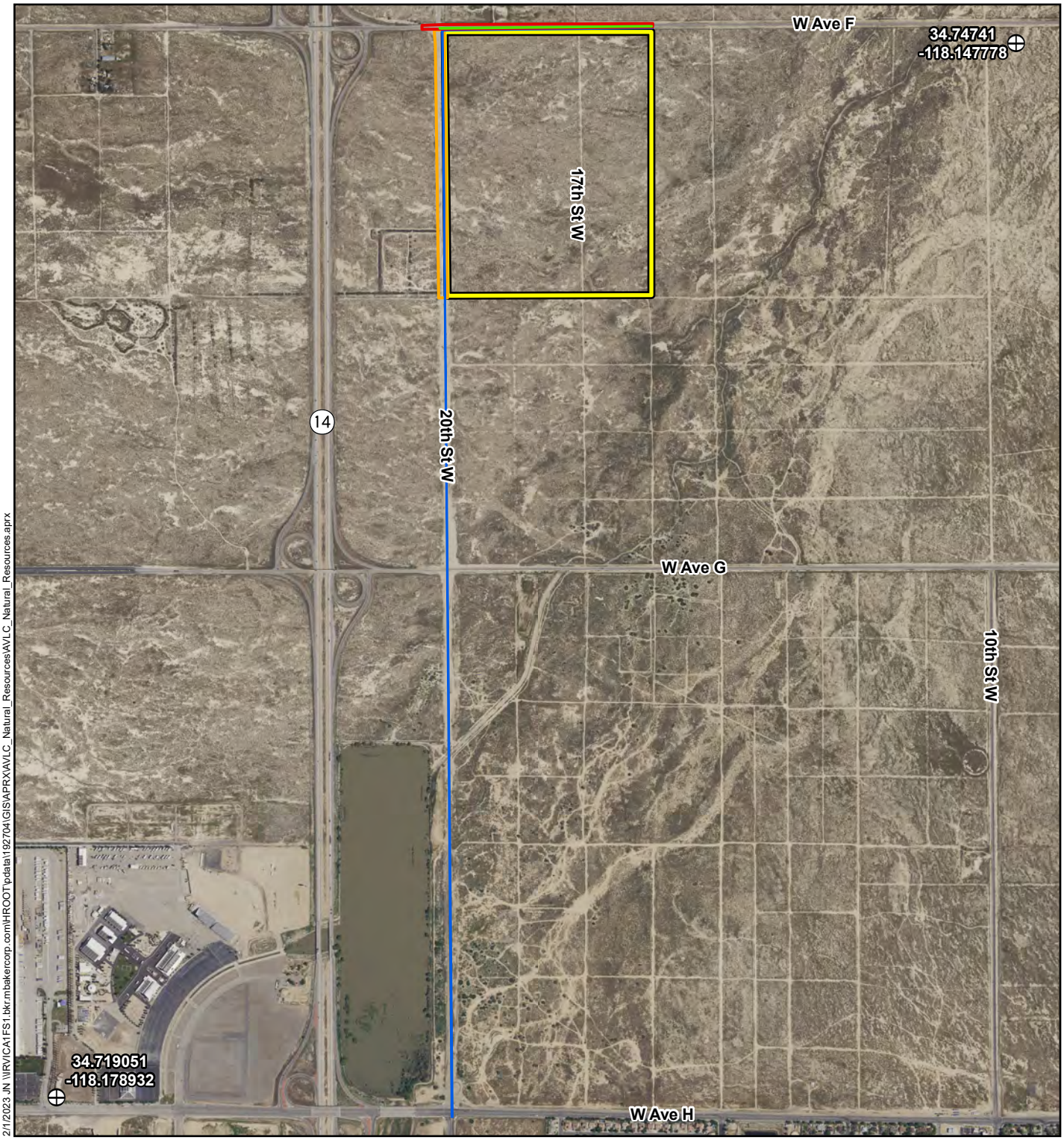
0 175 350 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

Figure 2



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Legend

- Project Site (118.55 acres)
- Reference Point

Offsite Improvements

- 20th Street Road Improvements
- Ave F Improvements - Turn Lanes/Possible Widening
- Sewer Extension - AVLC West
- Water - AVLC West

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0 700 1,400 Feet

Source: NAIP (2020)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Offsite Improvements

Figure 3

Section 2 Methodology

Michael Baker conducted thorough literature reviews and records searches to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site prior to conducting the field surveys. General habitat assessments or field surveys were conducted to document existing conditions and determine the potential for special-status plant and wildlife species to occur within the project site.

2.1 LITERATURE REVIEW

Prior to conducting the field surveys, literature reviews and records searches were conducted for special-status biological resources[2] potentially occurring on or within the vicinity of the project site. Special-status plant and wildlife occurrence records obtained during the most recent literature review from the USGS *Rosamond, Rosamond Lake, Lancaster East*, and *Lancaster West, California* 7.5-minute quadrangles were identified through a query of the CNDDB(CDFW 2023a), CIRP (CNPS 2023), and for the project region through a review of IPaC (USFWS 2023a).

The current regulatory/conservation status of special-status plant and wildlife species was verified through lists and resources provided by the CDFW, specifically the *Special Animals List* (CDFW 2023b), *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2023c), *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023d), and *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (CDFW 2023e). USFWS-designated Critical Habitat for species listed under the federal Endangered Species Act (FESA) was reviewed online via the Critical Habitat Mapper (USFWS 2023b).

In addition to the databases referenced above, Michael Baker reviewed a report by Rincon (2022) summarizing results of a database search and field survey of the project site conducted in May 2022. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources and are referenced in the appropriate sections below. Aerial photography was also reviewed prior to the field survey to locate potential natural corridors and linkages that may support the movement of wildlife through the area.

On-site and adjoining soils were researched prior to conducting the habitat assessment using the United States Department of Agriculture (USDA) *Custom Soil Resource Report for Antelope Valley Area, California* (USDA 2022). In addition, a review of the local geological conditions and historical aerial photographs (Google, Inc. 2022) was conducted to assess the ecological changes and disturbances that may

[2] As used in this report, "special-status" refers to species that are either federally-/State-listed, proposed, or candidates; species that have been designated a California Rare Plant Rank by the California Native Plant Society; species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife; and State/locally rare vegetation communities.

have occurred within the project site, as well as the probability of local wetland presence through the National Wetlands Inventory Mapper (USFWS 2022c).

The literature review provided a baseline from which to inventory the existing biological resources and evaluate the suitability of the project site to support special-status biological resources. Additional occurrence records of those species that have been documented on or within the vicinity of the project site were derived from database queries including the Calflora database (Calflora 2022). Additionally, standard field guides, texts and sources were used such as species accounts provided by Birds of the World (Billerman et. al 2020) and Cornell Lab of Ornithology's eBird Database (eBird 2022). The CNDDB was used in conjunction with GIS ArcView software to identify the locations of special-status species occurrence records identified within the USGS *Rosamond, Rosamond Lake, Lancaster East, and Lancaster West, California* 7.5-minute quadrangles. Refer to Section 5 for a complete list of technical references that were reviewed by Michael Baker.

2.2 FIELD SURVEY/HABITAT ASSESSMENT

Michael Baker biologists conducted a biological field survey/habitat assessment on November 21, and November 29, 2022, to document existing conditions and assess the potential for special-status biological resources to occur within or adjacent to the boundaries of the project site. All field surveys were conducted in accordance with applicable protocols and in a way to maximize the detectability of special-status species that may be present within the project site during the time of the survey. No limitations or restrictions on direct access to the project site were encountered by Michael Baker during the field surveys. Parcels surrounding the project site were scanned with binoculars from public rights-of-way. Refer to Table 1 below for a summary of specific field survey dates, times, surveyors, and weather conditions.

Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions

Date	Surveyors*	Time (start / finish)	Temperature (°F) (start / finish)	Wind Speed (mph) (start / finish)
November 21, 2022	AP, JP	0800 / 1500	30 sunny / 71 cloudy	0 – 0
November 29, 2022	RW	0730 / 1110	45 sunny / 64 sunny	1 – 5
*AP = Arthur Popp, JP = John Parent, RW = Ryan Winkleman				

Vegetation communities preliminarily identified on aerial photographs during the literature review were verified in the field by walking meandering transects throughout the project site. Naturally vegetated areas typically have a higher potential to support special-status plant and wildlife species than areas that are highly disturbed or developed, which have lower quality and/or reduced amounts of suitable habitat for plants and wildlife. All plant and wildlife species observed during field surveys conducted by Michael Baker across the project site, as well as dominant plant species within each vegetation community, were recorded in a field notebook. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, and the overall condition of on-site vegetation communities were recorded.

2.3 VEGETATION COMMUNITIES

Vegetation communities occurring within the project site were delineated on an aerial photograph during the field surveys and later digitized using the ArcView Geographic Information System (GIS) software to quantify the area of each vegetation community in acres. Vegetation communities occurring within the project site were classified in accordance with descriptions provided in the *Manual of California Vegetation* (Sawyer et al. 2009).

2.4 PLANTS

Plant species observed during the field surveys were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unfamiliar plants were photographed in the field and later identified in the laboratory using taxonomic guides. Plant nomenclature used in this report follows the *Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.5 WILDLIFE

Wildlife species detected during the field surveys by sight, calls, tracks, scat, or other types of evidence were recorded in a field notebook. Field guides used to assist with identification of species during the habitat assessment included *The Sibley Guide to Birds* (Sibley 2014) for birds, *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) for herpetofauna, and *A Field Guide to Mammals of North America* (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Union's *Checklist of North American Birds* (Chesser et al. 2019), nomenclature of amphibians and reptiles follows *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (Crother 2017), and nomenclature for mammals follows the *Bats of the United States and Canada* (Harvey et al. 2011) and *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

2.6 OTHER STUDIES

2.6.1 BURROWING OWL FOCUSED SURVEYS

Michael Baker biologists conducted focused surveys for burrowing owls (*Athene cunicularia*; Species of Special Concern [SSC]) on March 8, March 28, May 9, June 5, and July 6 during the 2023 breeding season. A focused burrow survey and focused surveys were completed in accordance with the survey guidelines and protocols provided in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The results of focused burrowing owl surveys are summarized in Section 3.6.2 of this report and the survey report is included as Appendix E.

2.6.2 RARE PLANT SURVEYS

No records of any special-status plant species were identified within AVLC-West during the literature search; however, Mojave spineflower (*Chorizanthe spinosa*) designated with a California Rare Plant Rank (CRPR) by the California Native Plant Society was recorded within the project site during a reconnaissance-level survey in May 2022 (Rincon 2022). No federally or State-listed species were identified during the 2022 survey. To provide a more systematic and comprehensive survey for this and any other rare plants that may occur on-site, Michael Baker conducted rare plant surveys during the regional blooming period (generally February through May) for special-status plant species, confirming the presence and extent of the previously recorded species and determining the presence/absence of any further special-status plants. Surveys followed CDFW (2018) protocols described in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. Survey protocols would be implemented in conjunction with protocols formulated by USFWS (2000) for the presence of special-status plant species in *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*. Three (3) surveys during the regional blooming period were conducted during May and June 2023.

The results of rare plant surveys are summarized in Section 3.6.1 of this report and a survey report summarizing the methods and results of the survey is included as Appendix D to this report.

2.6.3 CROTCH BUMBLE BEE

Dudek conducted protocol-level presence/absence surveys for Crotch bumble bee (*Bombus crotchii*) in 2023. Along with three other native bumble bee species, Crotch bumble bee was designated as a Candidate for listing as Endangered under the California Endangered Species Act (CESA) in 2022 and is afforded the protection of CESA while the California Fish and Game Commission determines if listing the species is warranted. While no standardized survey methodology is currently available from CDFW for Crotch bumble bee, the following survey methods were reviewed: (1) *U.S. National Protocol Framework for the Inventory and Monitoring of Bees* for North American bumble bees, prepared by S. Droege, J.D. Engler, E. Sellers and L.E. O'Brien (2017); and (2) Survey Protocols for the Rusty Patched Bumble Bee (*Bombus affinis*), a federally listed bumble bee located in the Midwestern United States, prepared by the U.S. Fish and Wildlife Service (2019). In June 2023, CDFW released the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species". Following survey protocols and considerations from these documents, Dudek conducted one (1) of the recommended three (3) survey passes on July 11, 2023, which coincided with the Colony Active Period (April through August) for Crotch bumble bee (CDFW 2023a). The surveys focused on surveying patches of blooming plants and looking at nest resources suitable for bumble bee use (i.e., small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, rock walls, and brush piles). Results of the Dudek study are provided in a memo report, *Crotch Bumble Bee Survey for the AVLC West Project, Lancaster, Los Angeles County, California* (Dudek 2023), prepared under separate cover, and summarized in Section 3.6.2 of this report.

2.6.4 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Michael Baker qualified wetland delineators Richard Beck, April Nakagawa, and Lauren Zameito, conducted a jurisdictional delineation for the proposed project on November 29, 2022 to identify and map the extent of waters of the U.S. (WoUS), including potential wetlands, and waters of the State (WoS) within the boundaries of the project site, if present. During the field delineation, Michael Baker utilized the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (United States Army Corps of Engineers [USACE] 2008) to document the presence and extent of jurisdictional features that would fall under the regulatory authority of the USACE, the Regional Water Quality Control Board (RWQCB), and the CDFW. The results of Michael Baker's jurisdictional delineation are provided within the *Delineation of Jurisdictional Waters for the proposed Antelope Valley Logistics Center West (AVLC West)* (Michael Baker 2023), prepared under separate cover, and summarized in Section 3.5 of this report.

Section 3 Results

The project site is located within an unincorporated area of Los Angeles County, north of West Avenue G, east of State Route 14, west of 15th Street West, and directly south of West Avenue F. The project site is approximately 119 acres in size and is mainly comprised of undisturbed natural vegetation communities, with generally flat topography. Based on a review of Google Earth historical aerial imagery, there has been no change within the project site since 2003 (Google, Inc. 2022). During the field survey, there were observations of homeless encampments and illegal dumping within the western third of the project site in the vicinity of 20th Street West, as well as occasional off-road vehicle tracks throughout the project site. Representative photographs taken throughout the project site are included in Appendix A. Land uses surrounding the project site to the north, east, south, and west consist of vacant land that is generally undisturbed, with a residential development further to the south of the project site.

3.1 TOPOGRAPHY AND SOILS

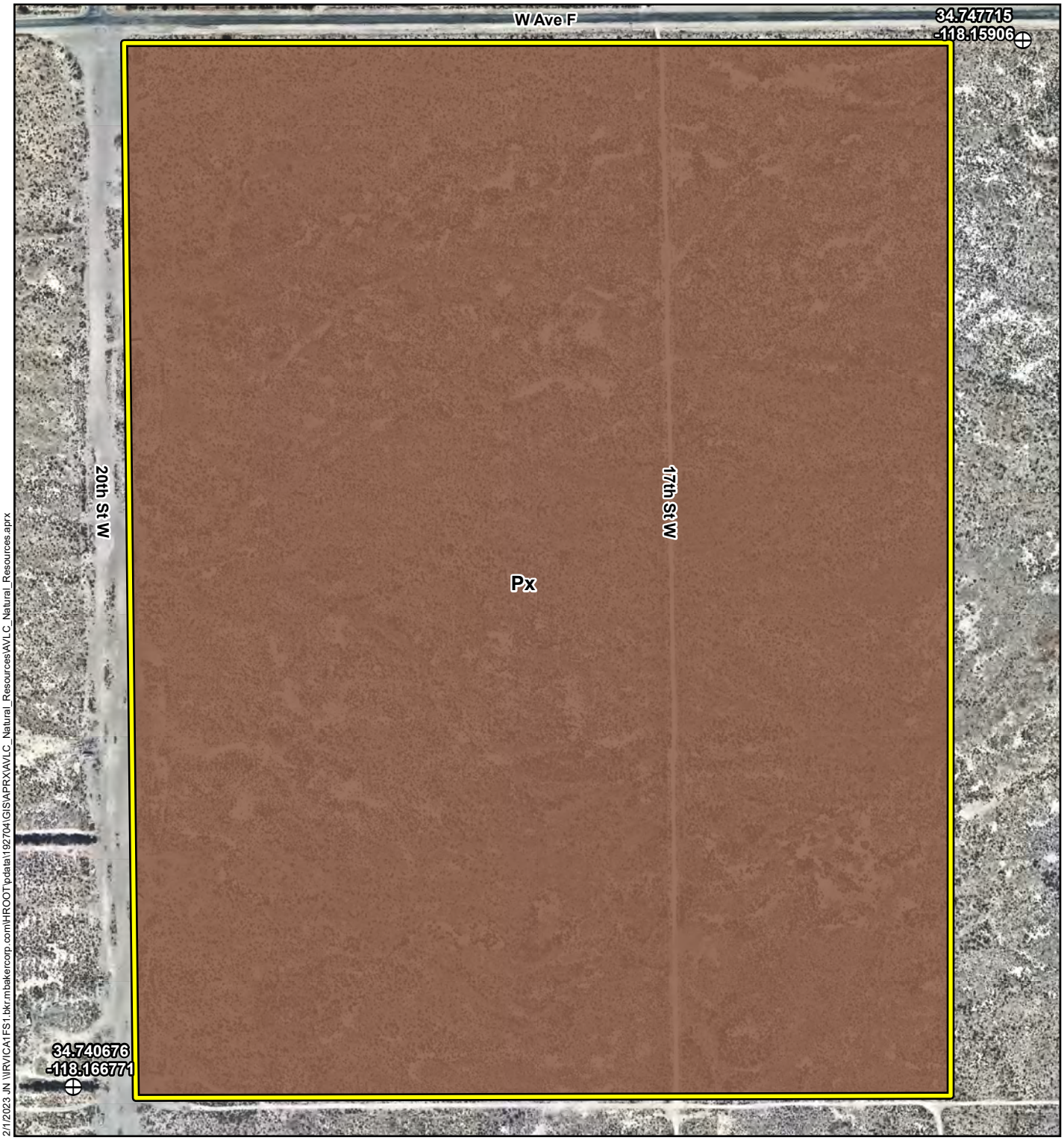
The project site is relatively flat, with on-site surface elevation ranges from approximately 2,305 to 2,311 feet above mean sea level (amsl). According to the *Custom Soil Resource Report for Antelope Valley Area, California* (USDA 2022), the entire project site is underlain by Pond-Oban complex (Px) soils. This soil complex is moderately well drained with a soil profile of silt or clay loamy soils. Refer to Figure 4, *USDA Soils*, for a depiction of soil units within the project site.

3.2 VEGETATION COMMUNITIES AND LAND COVER TYPES

One natural vegetation community, disturbed *Atriplex confertifolia* Shrubland Alliance, was observed and mapped within the boundaries of the project site. In addition, the project site contains one (1) land cover type classified as disturbed. These vegetation communities and land cover types are depicted on Figure 5, *Vegetation Communities and Land Cover Types*, and described in further detail below. The area of vegetation communities and land cover types identified within the project site and the impacts proposed to each are presented in Table 2 below. In addition, refer to Appendix B for a complete list of plant species that were observed within the project site during all field surveys conducted by Michael Baker across the project site.

Table 2: Vegetation Communities/Land Cover Types and Proposed Impacts

Vegetation Community/Land Cover Type	Acres within Project Site
Disturbed *Atriplex confertifolia* Shrubland Alliance	116.86
Disturbed habitat	1.69
TOTAL	**118.55**



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Legend

- Project Site (118.55 acres)
- Px — Pond-Oban complex
- ⊕ Reference Point

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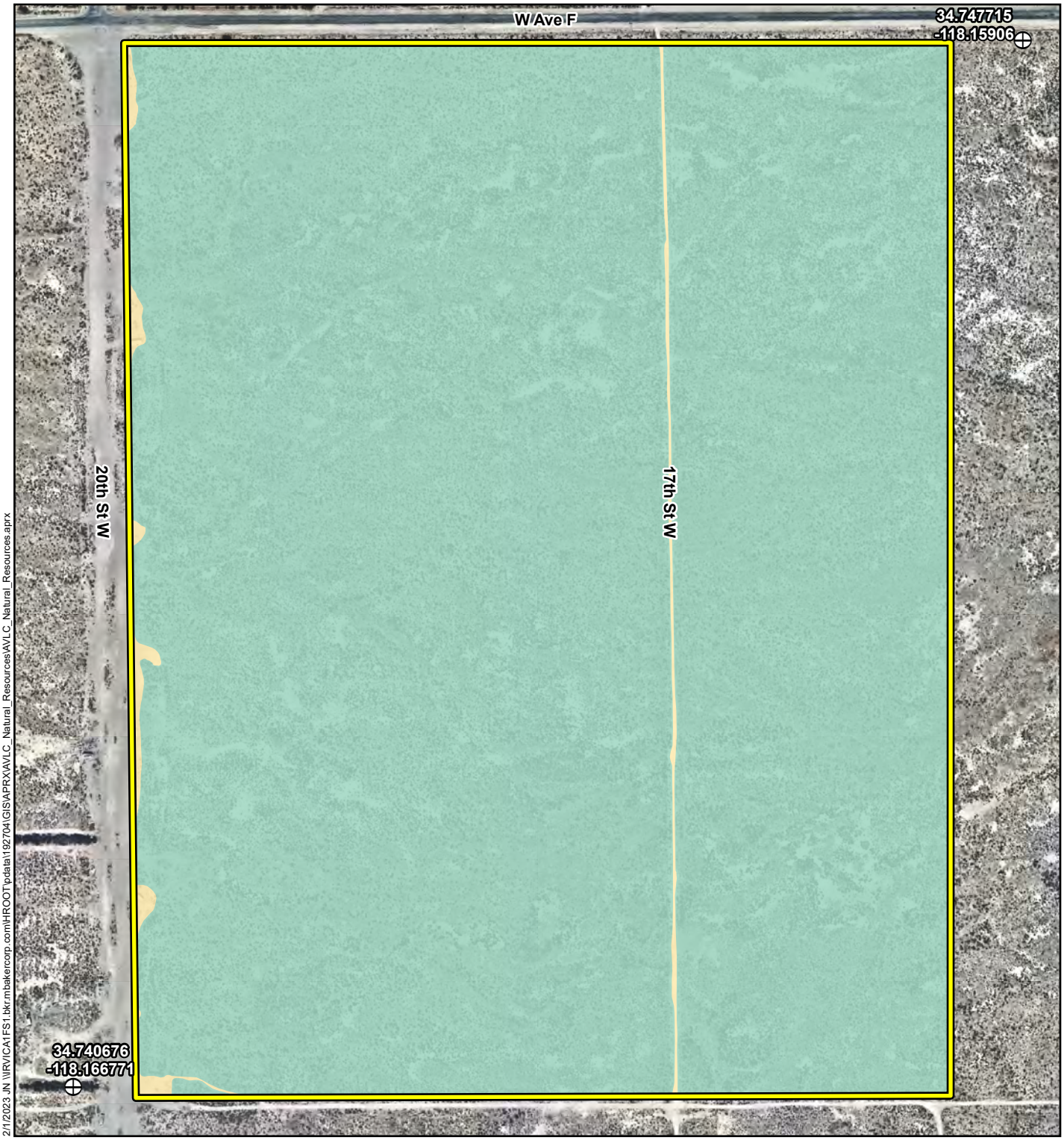
0 175 350 Feet

Source: Nearmap (09/2021), USDA (09/2022)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

USDA Soils

Figure 4



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Legend

- Project Site (118.55 acres)
- Reference Point
- Allscale Scrub (116.86 acres)
- Disturbed Habitat (1.69 acres)

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0 175 350 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Vegetation Communities and Land Cover Types

Figure 5

Native Vegetation Communities

This category includes vegetation communities dominated by plant species native to California.

3.2.1 DISTURBED ATRIPLEX CONFERTIFOLIA SHRUBLAND ALLIANCE

Nearly the entire project site is composed of *Atriplex confertifolia* Shrubland Alliance, dominated by shadscale saltbush (*Atriplex confertifolia*), with allscale saltbush (*Atriplex polycarpa*) a co-dominant species observed within this community. Fourwing saltbush (*Atriplex canescenes*) and rubber rabbitbrush (*Ericameria nauseosa*) were also occasionally observed. Herbaceous species observed within the project site include non-native short pod mustard (*Hirschfeldia incana*), brome grasses (*Bromus* sp), and Russian thistle (*Salsola* sp.), and native salt grass (*Distichlis spicata*). Plant species identified during field surveys conducted by Michael Baker across the project site are included in Appendix B.

Land Cover Types

3.2.2 DISTURBED

Approximately 1.69 acres of disturbed habitat is located along the western edge of the project site, along 20th Street West, where activities related to off-road vehicle use, illegal dumping, and homeless encampments have disturbed or removed the natural vegetative cover, resulting in areas primarily composed of bare ground or with a sparse cover of non-native weedy species and an occasional individual native scrub.

Additionally, the off-site improvement areas that are a part of the project and associated with utilities to service the project coincide with areas that have been previously disturbed/developed including West Avenue F along the northern perimeter and 20th Street West along the western perimeter (Figure 3). West Avenue F is a paved roadway with disturbed roadside habitat within its right-of-way, while 20th Street West is a dirt road, flanked by areas that have been disturbed by human use.

3.3 WILDLIFE

Natural vegetation communities provide wildlife foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a general discussion of those wildlife species that were observed during the field surveys or that are expected to occur based on existing site conditions. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions during which the field surveys were conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. Refer to Appendix B for a complete list of wildlife species observed during the field surveys.

3.3.1 FISH

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) with frequent sources of water that would be sufficient to support populations of fish were observed in the project site during the field survey. Therefore, no fish are expected to occur within the project site.

3.3.2 AMPHIBIANS

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable breeding habitat for amphibians were observed within the project site during the field survey. Therefore, no amphibians are expected to occur within the project site.

3.3.3 REPTILES

No reptile species were observed during the field surveys. Habitat within the project site is suitable for a number of other common reptilian species known from the region, such as western side-blotched lizard (*Uta stansburiana elegans*), western zebra-tailed lizard (*Callisaurus draconoides rhodostictus*), northern desert iguana (*Dipsosaurus dorsalis dorsalis*), desert spiny lizard (*Sceloporus magister*), Great Basin whiptail (*Aspidoscelis tigris tigris*), and red racer (*Coluber flagellum piceus*). The federally and State- listed threatened desert tortoise (*Gopherus aggassizii*) is also known to occur in vegetative community present in the project site. This species are discussed further in Section 3.6.2.

3.3.4 BIRDS

Common bird species that were observed within or adjacent to the project site included common raven (*Corvus corax*), say's phoebe (*Sayornis saya*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorhous mexicanus*), and northern mockingbird (*Mimus polyglottos*). Refer to Appendix B for a full list of observed species within and adjacent to the project site.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code[3] (CFGC). No active bird nests or birds displaying nesting behaviors were observed within the project site during the field surveys. *Atriplex confertifolia* Shrubland habitat within the project site provides suitable nesting opportunities for a variety of resident and migratory bird species, including those birds that nest on open ground (e.g., burrowing owl).

3.3.5 MAMMALS

The project site has the potential to support a variety of mammalian species; however, most mammalian species in the region are nocturnal and are difficult to observe during a diurnal habitat assessment. Black-

[3] Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 *et. sq.*).

tailed jackrabbit (*Lepus californicus*) and California ground squirrel (*Otospermophilus beecheyi*) were the only species directly observed during the field surveys. Other common mammalian species that may occur within the project site include coyote (*Canis latrans*), and white-tailed antelope squirrel (*Ammospermophilus leucurus*). Additionally, burrows/dens potentially suitable for desert kit fox (*Vulpes macrotis arsipus*) were observed on-site, although no individuals or sign of the species was observed.

There is no suitable roosting habitat for bat species (Order Chiroptera) within the project site, due to a lack of hollow trees, mines, caves, rock outcrops, deep rock crevices, and man-made structures (i.e., bridges, tunnels, and buildings) which may provide suitable bat roosting habitat.

3.3.6 INSECTS

No insects were noted during the November 2022 field survey; however, black harvester ants (*Veromessor pergandei*) and tarantula hawk (*Pepsis thisbe*) were observed during field surveys conducted in 2023. An unidentified bee species was also noted on flowering plants during 2023 surveys, likely a honey bee (*Apis* sp.).

3.4 MIGRATORY CORRIDORS AND LINKAGES

Wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

The project site is not located within any designated wildlife corridor or Significant Ecological Area (SEA) identified in the *City of Lancaster General Plan 2030* (City of Lancaster 2009) or *Los Angeles County General Plan* (County of Los Angeles 2015). The Antelope Valley SEA is located approximately 1.5-mile northeast of the project site and extends from the Angeles National Forest north to the playa lakes within Edwards Air Force Base. This SEA encompasses two large drainages originating along the northern slope of the San Gabriel Mountains. The geographical features of these drainages serve as major habitat linkages and movement corridors for all wildlife species within the vicinity (County of Los Angeles 2014). Additionally, the Antelope Valley region serves as an important migration route within the greater Pacific Flyway for numerous songbirds and raptors that migrate through and inhabit areas of the western Mojave desert.

Although wildlife species are more likely to utilize the Antelope Valley SEA as a wildlife corridor or linkage to other natural habitats, the project site does constitute a large open area of native vegetation, surrounded by similar habitats that have experienced limited anthropogenic disturbances. Areas to the north, west, and east of the project site include some past and current agricultural land uses, scattered rural residential developments, and paved and dirt roadways, but is largely undeveloped, connecting to vast open

areas in southern Kern County and beyond. As a result, mobile wildlife, such as large mammals and birds may utilize the project site to move throughout the Antelope Valley region and further areas to access resources. The project site also supports dispersal of smaller terrestrial species, such as reptiles and small mammals, across the localized area.

3.5 STATE AND FEDERAL JURISDICTIONAL WATERS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The USACE Regulatory Branch regulates discharge of dredged or fill material into "waters of the United States" pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the RWQCB regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated vegetation communities under Section 1600 *et seq*. of the CFGC.

As documented in the *Delineation of Jurisdictional Waters* (Michael Baker 2023), the project site does not include aquatic or riparian features that fall under the jurisdiction of state and/or federal regulatory agencies, based on the lack of evidence of such features on-site.[4] Therefore, no impacts to jurisdictional aquatic features are expected to occur as a result of project implementation.

3.6 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB and CIRP were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities in the USGS *Rosamond, Rosamond Lake, Lancaster East*, and *Lancaster West, California* 7.5-minute quadrangles and IPaC for the project region. The habitat assessment was conducted to assess and evaluate existing condition of the habitats within the boundaries of the project site to determine if the existing vegetation communities, at the time of the field surveys, have the potential to provide suitable habitat for special-status plant and wildlife species. Additionally, the potentials for special-status species to occur within the project site were determined based on the reported locations in the CNDDB, CIRP, and Calflora databases using the following guidelines:

- **Present**: the species was observed or detected within the project site during the field surveys.
- **High**: Recent occurrence records (within 20 years) indicate that the species has been known to occur on or within one mile of the project site and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the project site and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- **Moderate**: Recent occurrence records (within 20 years) indicate that the species has been known to occur within one mile of the project site and the site is within the normal expected range of

[4] Features are generally non-jurisdictional swales, away from any larger drainage feature, and are influenced largely by sheet flow. Based on periodic discussions with CDFW and Regional Board staff, jurisdictional areas are located to the east; these features are influenced by Amargosa Creek and also consist of concave claypan wetlands.

this species. There is suitable habitat within the project site, but the site is ecologically isolated from any local known extant populations or sightings.

- **Low**: Recent occurrence records (within 20 years) indicate that the species has been known to occur within five miles of the project site, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the project site.
- **Not Expected**: There are no occurrence records of the species occurring within five miles of the project site, there is no suitable habitat within the project site, and/or the project site is outside of the known or expected range for the species.

The literature search identified fourteen (14) special-status plant species and twenty-one (21) special-status wildlife species as occurring within the USGS *Rosamond, Rosamond Lake, Lancaster East, and Lancaster West, California* 7.5-minute quadrangles and in IPaC for the project region. No special-status vegetation communities were identified. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Special-status biological resources identified during the literature review as having the potential to occur within the vicinity of the project site are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix C.

3.6.1 SPECIAL-STATUS PLANT SPECIES

Fourteen (14) regional special-status plant species were identified during reviews of the CNDDB, CIRP, and IPaC. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are provided in Table C-1 in Appendix C. Special-status plant species that were observed within or adjacent to the project site during the field survey included Mojave spineflower, remnants of which were detected within the general area that this species was observed by Rincon (2022). This species has a CRPR of 4.2, the lowest ranking of conservation concern. Mojave spineflower was observed in the western third of the project, where individuals were dormant and almost undetectable at the time of the November 2022 survey.

Based on the results of the 2022 Rincon report, literature review, a review of specific habitat preferences, distributions, elevation ranges, and field surveys, alkali mariposa-lily (*Calochortus striatus*; CRPR 1B.2, has a high potential to occur within the project site. This species was detected by Rincon in 2022 just east of the project site, along Amargosa Creek and within a few hundred feet of the project site. All other special-status plant species either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions (refer to Table C-1, Appendix C).

As introduced in Section 2.6.2 of this report, rare plant surveys were conducted during the regional blooming period in the Antelope Valley. Michael Baker biologists tracked weather conditions and blooming periods and conducted three (3) surveys of the project site during May and June 2023, which coincided with the blooming period of special-status plant species that were determined to have potential to occur

within the project site. Two special-status plant species were detected and mapped during these surveys, including alkali mariposa lily and Mojave spineflower. Mojave spineflower was previously observed in the project site during surveys conducted by Michael Baker in November 2022 and was observed by Rincon during a survey conducted in May 2022 (Rincon 2022). Table 3 below provides results of the count and acreage quantities determined for each special-status species present on-site.

Table 3: Focused Special-Status Plant Survey Results

Scientific Name	Common Name	Count	Acreage*
Calochortus striatus	alkali mariposa lily	16	N/A
Chorizanthe spinosa	Mojave spineflower	4,179,468	15.16

* Areas containing small numbers of rare plant individuals (generally less than 50 individuals with a negligible acreage) were mapped using points rather than polygons and therefore are accounted for in the count section of the table.

A survey report summarizing the methods and results of rare plant surveys is included as Appendix D to this report.

3.6.2 SPECIAL-STATUS WILDLIFE SPECIES

Twenty-one (21) special-status wildlife species were identified during reviews of the CNDDB and IPaC. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are provided in Table C-2 in Appendix C. Although no burrowing owl were observed during protocol surveys conducted in 2023 and during the general biological survey conducted by Michael Baker biologists in November 2022, one individual was incidentally observed on December 12, 2022, by Michael Baker personnel conducting other site investigations, unrelated to biological resources. Loggerhead shrike (*Lanius ludovicianus*, SSC) was also observed during the survey in November 2022. In addition, northern California legless lizard (*Anniella pulchra*, SSC) was determined to have moderate potential to occur on-site, due to recent nearby observations recorded in the CNDDB and iNaturalist (2023). All other special-status wildlife species identified during the literature review either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions (refer to Table C-2, Appendix C).

Due to observations on-site during field surveys or their regional significance, burrowing owl (SSC), Swainson's hawk (*Buteo swainsoni*; SWHA; State-listed Threatened [ST]), loggerhead shrike (SSC), Mohave ground squirrel (ST), desert tortoise (federally-listed Threatened [FT] and ST), and Crotch bumble bee (*Bombus crotchii*; Candidate for State-listing) are described in further detail below.

Burrowing Owl

The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant *et al.*

1999). Burrowing owls are dependent upon the presence of burrowing mammals (e.g., California ground squirrels, coyotes, American badger [*Taxidea taxus*]) whose burrows are used for roosting and nesting. The presence or absence of mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing owls may also burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing open line-of-sight of the surrounding habitat to forage as well as watch for predators.

According to the CNDDB, there are twenty-nine (29) occurrence records for burrowing owl within the USGS *Rosamond, Rosamond Lake, Lancaster East*, and *Lancaster West, California* 7.5-minute quadrangles. The nearest extant occurrences (Occurrence Number [No.] 1062, 1063, 1067, and 1068) were recorded in 2004, approximately 1-mile east of the project site; active burrow sites were observed during a field survey on an abandoned agricultural field (CDFW 2022a). Additionally, another occurrence (No. 1888) was recorded in 2013, approximately 3.25 miles to the southwest of the project site; two adults and 1 juvenile were observed using a burrow (CDFW 2022a). In addition, there is a large number of records of this species in the eBird database, both within and just outside of a 5-mile radius from the project site (eBird 2022).

The project site is located near open space, with West Avenue F immediately to the north, State Route 14 to the west, West Avenue G to the south, and 15th Street West to the east of the site. There are little to no perching opportunities within or surrounding the project site. There were small mammal burrows observed throughout the project site during the field surveys and burrows suitable for nesting burrowing owls. As a result, the project site was determined to have moderate potential to support burrowing owl. However, with an incidental observation made within the western portion of the project site during surveys unrelated to biological resources on December 12, 2022, this species was determined to have high potential to be identified on-site.

As presented in Section 2.6.1 of this report, focused surveys for burrowing owl were conducted in 2023 in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). No individual burrowing owl were observed within the project site or survey area during protocol surveys and although numerous potentially suitable burrows were observed within the survey area, only one burrow with potential burrowing owl sign was observed during focused surveys. The sign observed included several old and degraded pellets of a suitable size and shape consistent with pellets from a burrowing owl. No other sign was observed throughout the survey area. A survey report summarizing the methods and results of focused burrow owl surveys is included as Appendix E to this report.

Swainson's Hawk

Swainson's hawk has historically nested around grasslands, shrublands, and open woodlands, particularly in California and in other agriculture-heavy regions where native habitat has been converted to farmland. This species has adapted to nesting in the vicinity of agricultural fields, particularly irrigated pastures and

in row, grain, and hayfields (Bechard et al. 2020). Nests are constructed in trees in close proximity to foraging habitat and may be constructed in lone trees or within a row of trees. This species is known to nest in the Antelope Valley with CNDDB occurrence records in Los Angeles County both east and west of State Route 14. With the exception of one CNDDB record, all are 5 plus miles from the project site; one record (No. 2773) of a nesting pair of Swainson's hawk is located approximately 2 miles east-southeast of the project site. This nesting pair was detected in June 2016 with no further information on nesting substrate or surrounding habitat.

Trees suitable for nesting by Swainson's hawk are absent from the project site. Native vegetation occurring on-site provides value as foraging habitat; however, this species often prefers foraging in and around agricultural areas that provide a suitable food source of small mammals, birds, and insects, species often attracted to agricultural areas that may provide food and water sources for prey of Swainson's hawk. This species may occur as a rare migrating or foraging transient across the project site, but is not expected to nest in the project site.

Loggerhead Shrike

The loggerhead shrike is a wide-ranging species that occupies open habitats including grassland, scrub and open woodland communities. They typically nest in isolated, densely-foliaged shrubs or trees, usually well concealed, and occasionally man-made structures and at the margins of open grasslands. Loggerhead shrikes feed on a variety of small prey including arthropods, mammals, amphibians, reptiles, and birds (CDFW 2023f). Because it lacks talons, the loggerhead shrike often impales prey on thorns or barbed wire. They are year-round residents in much of California, though they are generally absent from high altitudes in the Sierra Nevadas and dense forests in the northwest of the state. Loggerhead shrikes are highly territorial, with pairs maintaining territories during the breeding season and individuals maintaining territories during the winter (Yosef 1996).

One loggerhead shrike was observed in the far northern portion of the project site, along West Ave F during the November 2022 field survey; this species was not observed during surveys conducted in 2023. The shadscale scrub habitat occurring on-site provides suitable foraging habitat for the species, but generally only marginally suitable nesting habitat. One CNDDB record (No. 70) from the USGS *Lancaster East, California* 7.5-minute quadrangle was identified during the database review (CNDDB 2023a). This observation was from 2008 and from approximately 7.5 miles south-southeast of the project site. This species would most likely occur in the project site as a foraging or migrating transient and is not expected to nest on-site.

Mohave Ground Squirrel

The Mohave ground squirrel is a small diurnally-active rodent endemic to the western Mojave Desert of California in San Bernardino, Los Angeles, Kern, and Inyo counties. It has one of the smallest geographic ranges of any North American ground squirrel and spends much of the year in underground burrows to avoid the harsh conditions of its desert environment. Optimal habitats are open desert scrub, alkali desert

scrub, Joshua tree, and annual grasslands. MGS feed on a wide variety of green vegetation, seeds, and fruits and forage on the ground or in shrubs and Joshua trees. This species prefers sandy to gravelly soils and avoids rocky areas. Populations are reduced by urban development, off-road vehicle use, and agriculture.

According to the CNDDB, there are three (3) occurrence records for MGS within the USGS *Rosamond, Rosamond Lake, Lancaster East,* and *Lancaster West, California* 7.5-minute quadrangles. The nearest known extant record in the CNDDB (No. 26) is within five miles but was recorded more than 20 years ago in 1984. The project site is located near the southwestern-most edge of the MGS geographic range, but it is not within any area containing a core or peripheral MGS population (CDFW 2019). In addition, MGS were not detected within any regional surveys or protocol grids conducted within the Palmdale area between 2008 and 2012, and MGS have not been trapped or observed anywhere in Los Angeles County away from Edwards Air Force Base and its immediate boundary since 1991, with the closest positive results occurring approximately 15 miles northeast of the project site at the southern end of Rogers Lake (Leitner 2015). A recent update on the status of MGS by Leitner (2021) indicates that results of trapping efforts since the 2000's largely failed to document the species' occurrence in Los Angeles County, except for recent occurrences in the extreme northeastern corner of the county, on or adjoining Edwards Air Force Base. These results strongly suggest the species is essentially extirpated in Los Angeles County (Leitner 2021).

No incidental observations of MGS or sign of the species were made during general, focused burrowing owl, and focused rare plant surveys conducted in 2022 and 2023. Further, with a lack of occurrence records within the vicinity, results of past and recent Leitner studies (2015, 2022) reflecting negative results, and distance from existing populations, MGS is not expected to occur on-site.

Desert Tortoise

The desert tortoise (DETO) is currently designated as a State and federally threatened species. The Mojave population of the desert tortoise inhabits areas north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran Desert in California. Throughout the majority of the Mojave Desert, desert tortoise occurs most commonly on gentle sloping soils characterized by an even mix of sand and gravel and sparsely vegetated low-growing vegetation where there is abundant inter-shrub space. The typical habitat for this species is creosote bush scrub below approximately 5,500 feet in elevation. Wildflowers, grasses, and in some cases, cacti make up the bulk of their diet. Some of the more common forbs consumed by desert tortoise include desert dandelion (*Malacothrix glabrata*), primrose (*Camissonia* spp. and *Oenothera* spp.) desert plantain (Plantago ovata), milkvetches (Astragalus spp.), gilia (Gilia spp.), desert marigold (*Baileya multiradiata*), Mojave lupine (*Lupinus odoratus*), phacelia (*Phacelia* spp.), desert wishbone-bush (*Mirabilis laevis*), lotus (*Lotus* spp.), forget-me-nots (*Cryptantha* spp.), goldfields (*Lasthenia californica*), California coreopsis (*Leptosyne californica*), white-margin sandmat (*Euphorbia albomarginata*), and the introduced red stemmed filaree (*Erodium cicutarium*). The desert tortoise spends 95 percent of its life underground and will opportunistically utilize burrows of various lengths, deep caves, rock and caliche crevices, or overhangs for cover. Therefore, a moderately friable soil is required to allow for burrow construction and ensure that burrows do not collapse.

The project is not located within designated Critical Habitat for desert tortoise. However, the Antelope Valley SEA is located approximately 1.5-mile northeast of the project site. There are no occurrence records within 5 miles of the project site, however the CNDDB has one (1) occurrence records for desert tortoise within the USGS *Rosamond, Rosamond Lake, Lancaster East,* and *Lancaster West, California* 7.5-minute quadrangles. The closest extant record in the CNDDB (No. 1) was recorded in 2004 and is over 10 miles away to the east of the project site. The project site is located near the southwestern-most edge of the DETO geographic range.

No incidental observations of desert tortoise or sign of the species were made during general, focused burrowing owl, and focused rare plant surveys conducted in 2022 and 2023. Additionally, the species prefers sandy loam soils and avoids soils with excess levels of salt. Pond Oban soils occurring on-site have a profile of silt or clay loams and contain elevated levels of salts. Due to the marginally suitable habitat within the project, the lack of occurrence records within the vicinity, and distance from existing populations, DETO has a low expectancy to occur on-site.

Crotch Bumble Bee

Crotch bumble bee became a candidate for listing under CESA in September 2022, along with three other native bumble bee species. The species is found between San Diego and Redding in a variety of habitats including open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings. This species is endemic to California, with only a few records from Nevada and Mexico. The species is distinguished by its square-shaped face and rounded ankle on the midleg. Queens and workers (females) have a black head and face and display black color on their mid and bottom thorax and between their wing bases.

One CNDDB record (Occurrence Number 130) for this species was identified within the USGS *Rosamond, Rosamond Lake, Lancaster East,* and *Lancaster West, California* 7.5-minute quadrangles. The record is from 1971 and approximately 3 miles to the southwest of the project site. Two observations in the Lancaster area are recorded from the past three years in iNaturalist (2023). As presented in Section 2.6.3 of this report, one survey for Crotch bumble bee was conducted in 2023 by Dudek. No bumblebees were observed and no nests were found. Due to the lack of potential floral resources and limited small rodent burrows on-site, no further surveys were conducted after the first survey. It was determined that it was unlikely that bumble bees would be found on-site and that additional surveys would not be acceptable, due to a lack of plants in flower and natural senescence of desert vegetation during hot summer months. Dudek also determined that the nearest area with sufficient foraging opportunities for *Bombus* species is the Piute Pond complex, located approximately 4 miles northeast of the project site (Dudek 2023).

3.6.3 SPECIAL-STATUS VEGETATION COMMUNITIES

Special-status vegetation communities include those included as sensitive natural communities within the CNDDB, listed as sensitive by CDFW (CDFW 2022f), and aquatic features that fall under the jurisdiction of state and/or federal regulatory agencies (see Section 3.5). Special-status communities also include

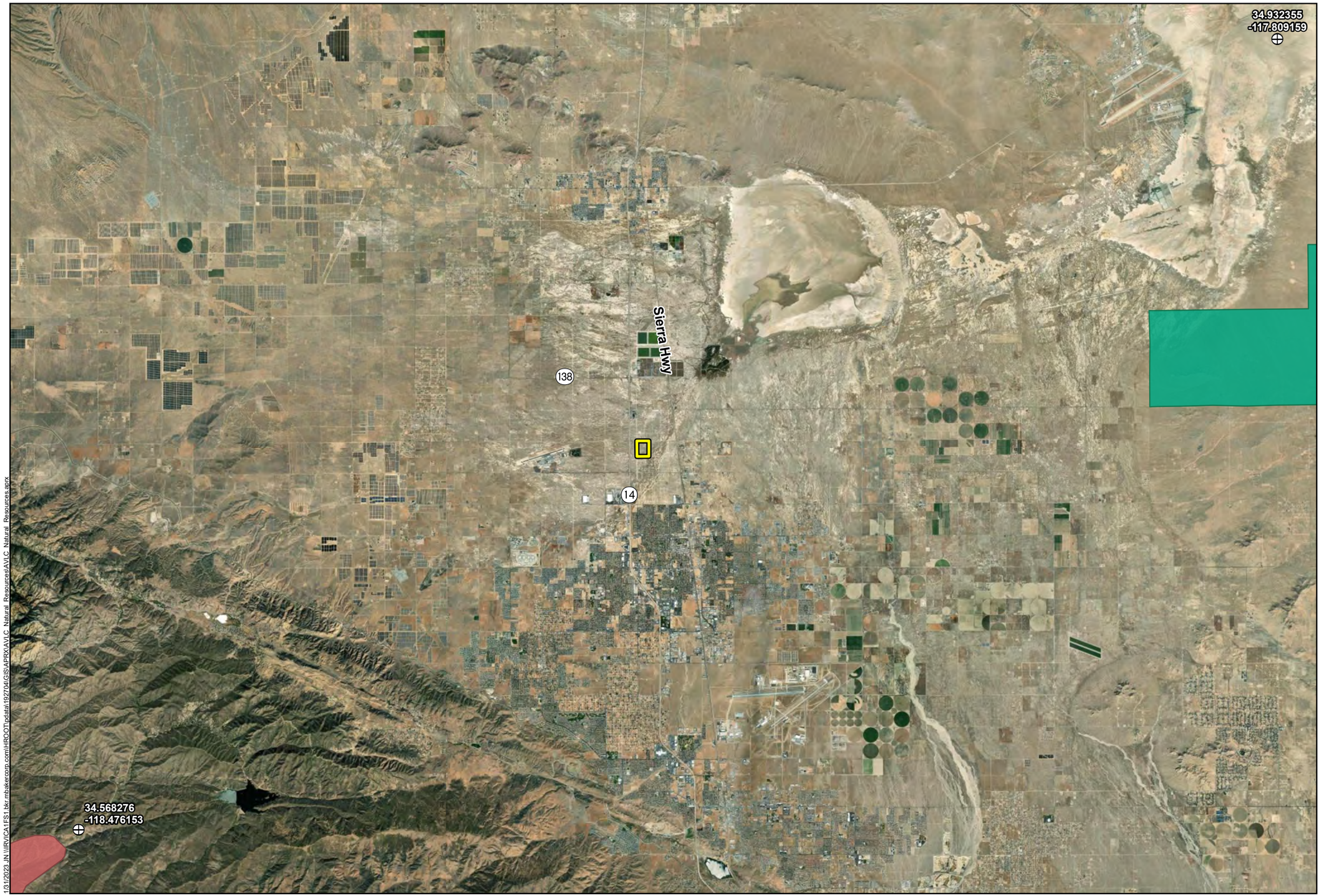
USFWS-designated Critical Habitat (discussed below) and other native vegetation communities that provide suitable habitat for special-status plant and wildlife species and may be occupied by such speices.

No special-status vegetation communities have been reported in the USGS *Rosamond, Rosamond Lake, Lancaster East*, and *Lancaster West, California* 7.5-minute quadrangles by the CNDDB and none were documented on-site during field surveys. The existing native vegetation community occurring on-site, *Atriple polycarpa* Shrubland, is not considered a sensitive natural vegetation community by CDFW (CDFW 2022f).

3.7 CRITICAL HABITAT

Under the definition included in the FESA, designated Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed and that contain the physical or biological features that are essential to the survival and eventual recovery of that species. Areas of Critical Habitat may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the occupied areas are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus include those that occur on federal lands, require federal permits (e.g., CWA Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS pursuant to the FESA.

The project site is not located in or within 5 miles of USFWS-designated Critical Habitat for any federally listed species as illustrated in Figure 6, *Critical Habitat*.



Legend

- Project Site (118.55 acres)
- California Red-legged Frog (*Rana draytonii*)
- Desert Tortoise (*Gopherus agassizii*)
- Reference Point

0 1.5 3 Miles

1/31/2023 J:\N\IRVICA1FS1.bkr.mbakercorp.com\HROOT\data\1927\04\GIS\APRX\AVLC Natural Resources\AVLC Natural Resources.aprx

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Critical Habitat

Figure 6

Michael Baker INTERNATIONAL

Source: Esri/Vivid (11/2021), USFWS (01/2023)

Section 4 Project Impact Analysis

Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

4.1 IMPACTS TO SPECIAL-STATUS SPECIES

This section evaluates potential impacts of the project pursuant to Appendix G(a) of the CEQA guidelines in relation to special-status species, sensitive vegetation communities, regulated aquatic features, wildlife movement, and consistency with any regional or local plans or ordinance that protect or manage biological resources.

4.1.1 SPECIAL-STATUS PLANT SPECIES

The proposed project is not anticipated to impact any federal or State listed plant species, as none are expected to occur within the project site (refer to Appendix C) and none were detected during focused rare plant surveys conducted in 2023. However, Mojave spineflower (CRPR 4.2) and alkali mariposa-lily (CRPR 1B.2) were detected on-site during rare plant surveys (refer to Section 3.6.1) and are anticipated to be directly impacted by the proposed project.

The project has the potential to impact up to 16 individual alkali mariposa lily and up to 4,179,468 individual Mojave spineflower covering 15.16 acres. Impacts to alkali mariposa lily, a species with a CRPR of 1B.2, would be considered significant under CEQA and as such would require mitigation to reduce impacts to below a level of significance. However, only a total of 16 individual alkali mariposa lily, covering a negligible area, were recorded within the survey area. Mitigation for impacts to alkali mariposa-lily may be achieved in conjunction with compensatory mitigation implemented for impacts to other special-status species mapped on-site (i.e. Mojave spineflower).

Mojave spineflower is a special-status species with a CRPR of 4.2; species with a CRPR of 3 or 4 generally do not require evaluation under CEQA when small numbers or areas of such species are impacted. However, given the quantity of Mojave spineflower present on-site, an evaluation of this CRPR 4 species under CEQA is warranted and mitigation for impacts to the species is required. Off-site preservation of habitat similar to that occupied by special-status plant species detected on-site is anticipated via an in-lieu fee program administered by an agency-approved mitigation bank. This strategy is anticipated to provide appropriate compensatory mitigation for impacts to Mojave spineflower. Avoidance and Minimization Measures (AMM) included in Section 4.7 below have been provided to reduce potential significant impacts to such species to a level below significance.

4.1.2 SPECIAL-STATUS WILDLIFE SPECIES

Burrowing Owl and Other Raptors

Construction-related disturbance may have an adverse impact on burrowing owl, if determined present, especially during the breeding season when individuals may be attempting to incubate eggs or raise young within or adjacent to the project site. The permanent and temporary loss of these species and/or their habitat would be potentially significant.

Additional raptor species, including Swainson's hawk, ferruginous hawk (*Buteo regalis*; WL), northern harrier (*Circus hudonius*; SSC), and merlin (*Falco columbarius*; WL) were identified during the literature review to be known from the vicinity of the project and surrounding Antelope Valley. These species were not observed during any field surveys and have only low potential to forage across the site; they are not known to nest in the project region. Direct impacts to these species are not anticipated; however, indirect impacts such as those described in Section 4.1 above could result in significant impacts. AMM included in Section 4.7 below have been provided to reduce potential significant impacts to burrowing owl and other special-status raptors.

Nesting Birds

The proposed project has the potential to impact active bird nests if vegetation is removed during the nesting season. Impacts to nesting birds are prohibited by the MBTA and CFGC. AMM included in Section 4.7 below have been provided to reduce potential significant impacts to nesting birds to less than significant with implementation of pre-construction nesting bird surveys and implementation of no disturbance buffers and nest monitoring.

Desert Tortoise

Desert tortoises were determined to have a low potential to occur within the project site. Although native desert vegetation occurring on-site provides potentially suitable habitat for this species, individuals or sign of this species were not observed during the general biological resource site survey conducted in November 2022 or incidentally observed during focused rare plant and burrowing owl surveys conducted during spring and summer 2023. As a result, impacts to this species are not anticipated and compensatory mitigation for impacts to this species or its habitat are not expected.

Mohave Ground Squirrel

Individuals or sign of this species were not observed during the general biological resource site survey conducted in November 2022 or incidentally observed during focused rare plant and burrowing owl surveys conducted during spring and summer 2023. As a result, impacts to this species are not anticipated and compensatory mitigation for impacts to this species or its habitat are not expected.

Crotch Bumble Bee

Although observations of this species are documented in iNaturalist (2023) from the project vicinity, no bumble bees or nests of bumble bees were observed on-site during a survey conducted in 2023. Further the nearest area with sufficient foraging opportunities for the species occurs at Piute Ponds, located approximately four miles northeast of the project site. As a result, this species is not expected to occur on-site and no impacts to Crotch bumble bee are anticipated.

Desert Kit Fox

While desert kit fox is not a special-status species[5], burrows suitable for denning/nursing by the species were observed on-site. A few observations of the species are documented in iNaturalist (2023) from the Antelope Valley, with one observation noted approximately five miles from the project site in 2018. While a potentially suitable burrow/den for this species was found on-site, no individuals or sign of the species were observed during field surveys; however, impacts to desert kit fox denning and nursing during

[5] Desert kit fox is not listed by the USFWS or CDFW under any special-status designation. It is considered a "fur-bearing mammal," protected from take under the California Fish and Game Commission's 2017–2018 Mammal Hunting Regulations (Subdivision 2, Chapter 5). Additionally, impacts during project construction to denning/nursing sites of the species would be considered significant under CEQA.

construction would be considered significant under CEQA. No indications of the site currently serving as a significant denning/nursing location for the species were observed; however, the species could utilize the project site for such activities prior to construction.

4.2 IMPACTS TO SENSITIVE VEGETATION COMMUNITIES

The native *Atriplex confertifolia* Shrubland community documented on-site is not listed as a California Sensitive Natural Community by CDFW (CDFW 2023f). Further the on-site community has been disturbed by anthropogenic activities associated with a homeless encampment along the western perimeter of the project site, which has resulted in disturbances to approximately the western third of the site, where off-road vehicle and illegal dumping activities have disturbed the vegetative community. The on-site habitat also includes a significant understory of non-native annual weedy species, further reflecting the disturbed nature of the natural vegetation community occurring on-site. However, with the presence of special-status plant species, compensatory mitigation for the loss of these species is required. Mitigation for the loss of on-site habitat is anticipated to be achieved via coordination with a regional, agency-approved conservation agency/land trust to identify and acquire off-site lands to hold under restrictive deed in perpetuity. This strategy is anticipated to provide appropriate compensatory mitigation for the loss of the on-site habitat that supports special-status species. An AMM has been included in Section 4.7 below to compensate for the loss of on-site habitat.

4.3 IMPACTS TO JURISDICTIONAL AQUATIC FEATURES

As presented in Section 3.5 of this report, the project site does not contain any State or federally protected aquatic features based on the lack of aquatic evidence as described in Section 3.5 above. Therefore, no impacts to jurisdictional features are expected to occur due to project related activities and permits from the USACE, RWQCB, and CDFW are not anticipated.

4.4 IMPACTS TO WILDLIFE MOVEMENT AND NURSERY SITES

The proposed project will generally impact the movement of wildlife through the project site to further areas of undeveloped land to the north, east, and west of the project site. However, similar habitat to that occurring on the project-site occurs in the surrounding area and the proposed project will still allow wildlife to move around the project site. Although the AMM included in Section 4.7 below are not directly intended to reduce any potential disruption to wildlife movement, the have been provided to reduce potential impacts to sensitive biological resources, indirectly supporting wildlife movement.

No evidence of the project site serving as a significant nursery site was detected during the field surveys. The project site is generally composed of one relatively common native vegetation community, although disturbed by an understory consisting of primarily non-native herbaceous plants species; and no trees and only a few large shrubs, and no surface waters occur on-site. Mammal burrows were observed, although no recent sign of use or occupation where observed; it is possible that significant rain events during the 2022-2023 wet season obscured sign of mammal use. Mammal activity during the November 2022 survey and

during burrowing owl surveys was very minimal, with only observations of a few mammal species (refer to Appendix B). Larger burrows suitable for coyote denning were observed on-site, as well as the previously noted burrows potentially suitable for burrowing owl, as well as desert kit fox. While indications of the site serving as a significant denning or nursery site were not observed during field surveys, with the presence of suitable burrows for fossorial species, the project site provides suitable mammal denning opportunities, although likely only supporting a localized population. AMM have been provided below in Section 4.7 to avoid and mitigate for the potential loss of the project site's value as a nursery site for local wildlife populations.

4.5 IMPACTS TO LOCAL POLICIES AND ORDINANCES

The proposed project will not conflict with any local policies or ordinances protecting biological resources. In addition, the project site is not located within or adjacent to a designated Los Angeles County Significant Ecological Area (SEA) and thus would have no impacts on the SEA Program. Therefore, the project would have no impact on any local policies or ordinances protecting biological resources.

4.6 IMPACTS TO HABITAT CONSERVATION PLANS

The project site is not within or directly adjacent to areas contained within any conservation plans. Therefore, the project would have no impact on an adopted conservation plan.

4.7 AVOIDANCE AND MINIMIZATION MEASURES

The following project-specific Avoidance and Minimization Measures (AMM) are provided to reduce potential direct and indirect impacts to biological resources.

To avoid and/or minimize impacts to special-status species and their habitats, the following AMM typical to projects where native vegetation would be removed and special-status species may be present shall be implemented:

BIO-1: Prior to the issuance of a grading permit and fourteen (14) days prior to the initiation of any project activities, the resume of a proposed qualified biologist shall be submitted to County Planning for review and approval. That person shall serve as the lead biological monitor and ensure that impacts to all biological resources are minimized or avoided, and shall conduct (or supervise) pre-grading field surveys for species that may be avoided, affected, or eliminated as a result of grading or any other site preparation activities. The lead biological monitor shall ensure that all surveys are conducted by qualified personnel (e.g., avian biologists for bird surveys, herpetologists for reptile surveys, etc.), the resumes of which shall be submitted to County Planning for review and approval, and that they possess all necessary permits and memoranda of understanding with the appropriate agencies for the handling of potentially-occurring special-status species. The lead biological monitor shall also ensure that daily monitoring reports (e.g., survey results, protective actions, results of protective actions,

adaptive measures, etc.) are prepared, and shall make these monitoring reports available to County Planning and CDFW at their request.

A qualified biologist shall present a Worker Environmental Awareness Program (WEAP) to all construction crews and contractors prior to starting any work on the project site. The WEAP shall be submitted to County Planning for review and approval no less than fourteen (14) days prior to the initiation of any project activities. The WEAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained shall be maintained and submitted to County Planning upon their request.

Project limits shall be clearly delineated with fencing or other boundary markers prior to the start of construction. During construction, construction workers shall strictly limit their activities, vehicles, equipment, and construction materials to the designated construction limits and staging areas.

The biological monitor shall be present during vegetation and ground disturbance activities to inspect and enforce mitigation requirements and to relocate any species that may come into harm's way to an appropriate offsite location of similar habitat. Upon completion of vegetation and earth disturbance activities, the biological monitor shall be available to conduct as needed spot checks during construction and respond to requests from project personnel as they arise to remove wildlife, answer any questions, and generally provide as-needed support to confirm project measures are implemented. The biological monitor shall be authorized to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. The biological monitor shall submit weekly reports of the monitoring activities to County Planning and CDFW. Reports shall include a description of the construction activities monitored, any compliance issues observed, how they were resolved, any avoidance and minimization measures implemented, and lists of wildlife and plant species observed within the project area. If ongoing biological monitoring of construction activities reveals the presence of any special-status wildlife within an active work area, then work shall be temporarily halted until the animals leave on their own volition or can be collected and relocated to areas outside of the designated work zones. Work areas shall be surveyed for special-status species during construction activities. Any special-status species occurring within the work area shall be collected and relocated to areas outside of the designated work zones (unless such relocation would require an Incidental Take Permit for take of a listed species, in which case the appropriate trustee agencies (CDFW or USFWS) will be consulted first).

During construction, all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the project limits. Equipment

shall be checked daily for leaks prior to operation and repaired as necessary, and secondary containment shall be implemented during equipment and vehicle staging.

During construction, the project limits shall be kept as clean of debris and trash as possible to avoid attracting predators of sensitive wildlife. Food-related trash items shall be kept in sealed containers and removed daily from the construction work zone.

To avoid entrapment, injury, and mortality of special-status and common wildlife species during construction, the following AMM related to managing trenches and holes shall be implemented:

BIO-2 The contractor shall cover or backfill all trenches, holes, and open water sources (e.g., water buffalos, water tanks, and slurry dumpsters) the same calendar day they are opened, where practicable. These areas shall be covered to prevent wildlife from becoming trapped or drowning.

If trenches or holes cannot be closed the same day they are made, covers shall be firmly secured at ground level in such a way that small wildlife cannot slip beneath. At sites that require the presence of a biological monitor, trench covers shall be approved by the monitor. If covers cannot be provided, escape ramps shall be placed in all trenches and holes.

Open trenches shall be inspected regularly throughout the day and prior to filling to remove any trapped wildlife (e.g., small mammals, reptiles, amphibians) and to check for the presence of protected wildlife species at Project sites that require the presence of a biological monitor.

If a state or federal listed wildlife species is present in the trench, the on-site Biological Monitor shall contact CDFW or USFWS immediately, ensure the protected species is not in immediate danger, and wait for instruction by CDFW or USFWS.

Covered trenches and holes at sites where biological monitors are present are to be inspected by the monitor at the end of the work day and prior to initiating construction activities the next day.

In locating trenches or holes, disturbance to natural vegetation, including plant root systems shall be minimized.

As presented in this report, special-status plant species were recorded on-site in 2023 and it is anticipated that all on-site habitat would be removed during construction. To determine the special-status plant species present and their distribution on-site, updated rare plant surveys shall be conducted prior to construction in accordance with the following AMM:

BIO-3: To ensure proper compensatory mitigation for impacts to special-status plant species, prior to construction, and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified botanist approved by County Planning

shall have conducted focused rare plant surveys across the entire project site following 2018 CDFW and/or 2001 CNPS guidelines to determine presence or absence of special-status plant species. Resumes of botanists conducting the survey shall be submitted to County Planning as part of the documentation regarding the surveys. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and include site visits covering early, mid, and late-blooming season species. Documentation of surveys and findings shall be submitted to County Planning and the CDFW for review within fourteen (14) days of completion of surveys.

For the loss of Mojave spineflower and alkali mariposa-lily known to occur on-site, the project proponent shall coordinate with a regional conservation agency or land trust to identify off-site lands that may be acquired and held in a restrictive deed for perpetuity to compensate for the loss of 15.16 acres of on-site habitat occupied by special-status plant species at a ratio of at least 0.5:1. It is expected that the acquired lands would be located in the Antelope Valley region of Los Angeles County and would support populations of each special-status plant species approximately equal in number to those recorded within the project site. During selection of the mitigation lands, consideration of the mitigation site's suitability to support burrowing owl, desert kit fox, and nesting birds should be taken into consideration. Acquisition of mitigation lands would be fully funded to support management and maintenance of the property by the conservation agency. The project proponent shall be fully responsible to implement this measure to the satisfaction of County Planning. Although not expected, if State- and/or Federally-listed plant species are present and avoidance is infeasible, consultation with the CDFW and/or USFWS would be required prior to initiating any on-site project activities.

The project site contains suitable nesting and foraging habitat for burrowing owls. To avoid and/or minimize potential impacts to this species, the following AMM is provided:

BIO-4: A burrowing owl clearance survey shall be conducted no more than 14 days prior to any vegetation removal or ground disturbing activities to avoid impacts to burrowing owls and/or occupied burrows. The pre-construction clearance survey shall be conducted by qualified biologists approved by County Planning and in accordance with the methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The resumes of qualified biologists shall be submitted to County Planning no less than fourteen (14) days prior to the clearance survey. Documentation of surveys and findings shall be submitted to County Planning and the CDFW for review within fourteen (14) days of completion of the clearance survey. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures shall be required.

Regardless of pre-construction survey results, to account for the presence of owls if a burrow becomes occupied after construction has commenced or is detected during pre-construction surveys, a burrowing owl avoidance and minimization plan in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) shall be prepared and submitted to County

Planning and CDFW for approval no less than thirty (30) days prior to the initiation of any project activities. The plan would detail implementation of "no-disturbance" buffers and burrow exclusion activities in the event an occupied burrow is detected.

Habitats and vegetation within and surrounding the project site have the potential to support breeding and nesting birds that are protected pursuant to the MBTA and CFGC. To avoid and/or minimize potential impacts to nesting birds, the following AMM is provided:

BIO-5: Proposed project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1 – August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (California Fish and Game Code Section 86), and includes take of eggs or young resulting from disturbances which cause abandonment of active nests. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.

If avoidance of the avian breeding season is not feasible, qualified biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys beginning thirty (30) days prior to the initiation of project activities, to detect protected native birds occurring on-site and, as access to adjacent areas allows, other suitable habitats within 500 feet of the project site. The resumes for biologists conducting pre-construction surveys shall be submitted to County Planning for review and approval no less than fourteen (14) days before surveys are initiated. The surveys shall continue on a weekly basis with the last survey being conducted no more than three (3) days prior to the initiation of project activities. The results of each weekly survey shall be submitted to County Planning no more than seven (7) days after completion of the survey.

If a protected native bird is found, the project proponent may delay all project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist may continue the surveys in order to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. The project proponent shall include the results of the recommended protective measures described above in weekly pre-construction survey reports to document compliance with applicable State and federal laws pertaining to the protection of native birds.

If the biological monitor determines that a narrower buffer between the project activities and observed active nests is warranted, he/she shall submit a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) to County Planning and, upon request, the CDFW. Based on the submitted information, County Planning (and the CDFW, if the CDFW requests) will determine whether to allow a narrower buffer.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to County Planning during the grubbing and clearing of vegetation, and shall notify County Planning immediately if project activities damage active avian nests.

The project site contains burrows suitable for denning/nursing by desert kit fox. To avoid and/or minimize construction level impacts to denning/nursing activities by this species, the following AMM is provided:

BIO-6: At least thirty (30) days prior to project ground disturbance activities, a Desert Kit Fox Management Plan shall be prepared and submitted to County Planning and the CDFW for review and approval. The plan shall (1) incorporate pre-approval survey data of the desert kit fox population; (2) identify preconstruction survey methods for desert kit fox; and (3) describe preconstruction and construction-phase biological monitoring and passive relocation methods, or outline any identified CDFW permit and Memorandum of Understanding requirements for active relocation of the species, if either are necessary.

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Appendix A Site Photographs

Photograph 1: Southeast-facing view from northwest corner of the project site.

Photograph 2: North-facing view from near the southwest corner of the project site.

Photograph 3: South-facing view from the approximate center of the project site.

Photograph 4: West-facing view across the project site.

Photograph 5: Dumped material along southern boundary of project site.

Photograph 6: East-facing view in the southeast portion of the project site.

Photograph 7: South-facing view of a potential coyote den the near eastern border of the project.

Photograph 8: West-facing view from the northeast corner of the project site, with West Avenue F at right.

Appendix B Plant and Wildlife Species Observed List

Table B-1 Plant Species Observed

Scientific Name*	**Common Name**	**Cal-IPC Rating****	**Special-Status Rank*****
Amsinckia sp.	fiddleneck		
Ambrosia dumosa	white bursage		
Atriplex canescens	fourwing saltbush		
Atriplex confertifolia	shadscale		
Atriplex lentiformis	big saltbush		
Atriplex polycarpa	allscale saltbush		
*Atriplex prostrata**	fat-hen		
*Bromus madritensis**	Spanish brome	High	
*Bromus tectorum**	cheatgrass	High	
Calochortus striatus	alkali mariposa lily		1B.2
Centromadia pungens ssp. *pungens*	common tarweed		
Chorizanthe spinosa	Mojave spineflower		4.2
Chylismia claviformis	clavate fruited primrose		
Cryptantha sp.	cryptantha		
*Descurainia sophia**	flix weed	Limited	
Distichlis spicata	salt grass		
Ericameria nauseosa	rubber rabbitbrush		
Eriogonum microtheca	slender buckwheat		
*Erodium cicutarium**	coastal heron’s bill	Limited	
Forestiera pubescens	desert olive		
Frankenia salina	alkali heath		
*Hordeum murinum**	wall barley	Moderate	
*Hirschfeldia incana**	shortpod mustard		
Lepidium fremontii	desert pepperweed		

Table B-1 Plant Species Observed

Scientific Name*	**Common Name**	**Cal-IPC Rating****	**Special-Status Rank*****
*Lepidium perfoliatum**	clasping pepperweed		
Lycium andersonii	Anderson thornbush		
Malacothrix coulteri	snake's-head		
Matricaria discoidea	pineapple weed		
Mentzelia albicaulis	whitestem blazingstar		
Pectocarya penicillata	northern pectocarya		
Phacelia fremontii	Fremont's phacelia		
Schismus barbatus *	common Mediterranean grass	Limited	
Tamarix sp.*	salt cedar	High	
Tetradymia axillaris	catclaw horsebrush		
Uropappus lindleyi	silver puffs		

* Non-native species

** **California Invasive Plant Council (Cal-IPC) Ratings**

High These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes

result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

*** **Special-Status Rank**

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 – Watch List.

Threat Ranks

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

.3 Not very threatened in California (less than 20% of occurrences threated / low degree and immediacy of threat or no current threats known).

Table B-2 Wildlife Species Observed

Scientific Name*	**Common Name**	**Special-Status Rank*** **
BIRDS		
Artemisiospiza belli	Bell's sparrow	
Buteo jamaicensis	red-tailed hawk	
Callipepla californica	California quail	
Cathartes aura	turkey vulture	
Corvus brachyrhynchos	American crow	
Corvus corax	common raven	
Eremophila alpestris	horned lark	
Haemorhous mexicanus	house finch	
Melospiza melodia	song sparrow	
Lanius ludovicianus	loggerhead shrike	SSC
Mimus polyglottos	northern mockingbird	
Sayornis saya	Say's Phoebe	
Setophaga coronata	yellow-rumped warbler	
Spinus psaltria	lesser goldfinch	
Sturnella neglecta	western meadowlark	
Zenaida macroura	mourning dove	
Zonotrichia leucophrys	white-crowned sparrow	
MAMMALS		
Canis latrans	coyote	
Lepus californicus	black-tailed jackrabbit	
Otospermophilus beecheyi	California ground squirrel	
Sylvilagus audubonii	desert cottontail	

Table B-2 Wildlife Species Observed

Scientific Name*	**Common Name**	**Special-Status Rank*** **
REPTILES		
Aspidoscelis tigris tigris	great basin whiptail	
Scleroporus occidentalis	western fence lizard	
Uta stansburiana elegans	western side-blotched lizard	
INSECTS		
Apis sp.	European honey bee	
Pepsis thisbe	tarantuala hawk	
Veromessor pergandei	black harvester ant	

*** **Special-Status Rank**

California Department of Fish and Wildlife

SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:

- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

Appendix C Potentially Occurring Special-Status Biological Resources

Table C-1: Special-Status Plant Species and Vegetation Communities

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Astragalus preussii* var. *laxiflorus Lancaster milk-vetch	1B.1 G4T2 S1	Perennial herb. Occurs in chenopod scrub in California only near Lancaster and Edwards Air Force Base, where extremely rare. Found at approximate elevation of 2,295 feet amsl. Blooming period is March through May.	No	**Low:** Chenopod scrub preferred by this species occurs within the project site; however, the only occurrence record identified during the review of the CNDDB (Occurrence Number 1) for this species was recorded in 1902 approximately 2.5 miles southeast of the project site.
Calochortus striatus alkali mariposa-lily	1B.2 G3 S2S3	Perennial bulbiferous herb. Occurs in alkaline and mesic microhabitat in chaparral, chenopod scrub, Mojavean desert scrub, and meadows and seeps. Found at elevations ranging from 230 to 5,235 feet amsl. Blooming period is April through June.	No	**High:** Mojavean desert scrub preferred by this species is present within the project site. Additionally, the species has been observed within a few hundred feet to the east on an adjacent parcel (Rincon 2022).
Calystegia peirsonii Peirson's morning-glory	4.2 G4 S4	Perennial rhizomatous herb. Habitats include chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Found at elevations ranging from 98 to 4,921 feet. Blooming period is from April to June.	No	**Not Expected:** Chaparral, chenopod and coastal scrub, cismontane woodland, and lower montane coniferous forest preferred by this species are not present within the project site.
Canbya candida white pygmy-poppy	4.2 G3G4 S3S4	Annual herb. 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 amsl. Blooming period is March through June.	No	**Not Expected:** Although there is Mojavean desert scrub habitats within the project site, there are no occurrence records for this species within 5.0 miles of the project site.
Castilleja plagiotoma Mojave paintbrush	4.3 G4 S4	Perennial herb (hemiparasitic). Grows in Great Basin scrub (alluvial), Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland habitats. Found at elevations ranging from 984 to 8,202 feet. Blooming period is from April to June.	No	**Not Expected:** Great Basin scrub, Joshua tree woodland, lower montane coniferous forest and pinyon juniper woodlands preferred by this species are not present within the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	1B.1 G3T2 S2	Annual herb. Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet amsl. Blooming period is April through June.	No	**Not Expected:** Chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins preferred by this species are not present within the project site. Additionally, the only occurrence record (Occurrence Number 38) for this species within 5.0 miles of the project site was recorded in 1896.
Chorizanthe spinosa Mojave spineflower	4.2 G4 S4	Annual herb. Found on sometimes alkaline soils within Joshua tree woodland, playas, Mojavean desert scrub, and chenopod scrub habitats. Found at elevations ranging from 20 to 4,265 feet. Blooming period is March through July.	Yes	**Present:** The species was observed within the western portion of the project site during surveys in November 2022.

Table C-1: Special-Status Plant Species and Vegetation Communities

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Eriastrum rosamondense Rosamond eriastrum	1B.1 G1? S1?	Annual herb. Occurs in Chenopod scrub and vernal pool habitats. Found at elevations ranging from 2,200 to 2,345 feet amsl. Blooming period is in May.	No	**High:** Chenopod scrub habitat preferred by this species occurs in the project site and there are two records in the CNDDB of this species occurring within 2 miles of the project site, and dated from approximately 18 and 30 years ago. Approximately 5 additional CNDDB records occurring from within 5 miles of the project site, with the most recent from 12 years ago.
Eriophyllum mohavense Barstow woolly sunflower	1B.2 G2 S2	Annual herb. Occurs in chenopod scrub, playas, and Mojavean desert scrub habitats. Found at elevations ranging from 1,640 to 3,150 feet amsl. Blooming period is March through May.	No	**Not Expected:** Although Mojavean desert scrub habitat preferred by this species is present within the project site, there are no occurrence records for this species within 5.0 miles of the project site.
Goodmania luteola golden goodmania	4.2 G3 S3	Annual herb. Occurs in Mojavean desert scrub, meadows and seeps, playas, and valley and foothill grasslands. Found at elevations ranging from 65 to 7,220 feet amsl. Blooming period is April through August.	No	**High:** Mojavean desert scrub habitat preferred by this species is present within the project site and there are several Calflora records from within 2 miles of the site and from the past 25 years.
Loeflingia squarrosa* var. *artemisiarum sagebrush loeflingia	2B.2 G5T3 S2	Annual herb. Occurs in sandy desert dunes, Great Basin scrub, and Sonoran desert scrub. Found at elevations ranging from 2,295 to 5,300 feet amsl. Blooming period is April through May.	No	**Not Expected: S**andy desert dunes, Great Basin scrub, and Sonoran desert scrub habitats preferred by this species are not present within the project site.
Monardella exilis Mojave monardella	4.2 G3? S3	Annual herb. Occurs in sandy soils within desert dunes, Mojavean desert scrub, Great Basin scrub, chenopod scrub, pinyon and juniper woodland, Joshua tree woodland, and lower montane habitats. Found at elevations ranging from 1970 feet to 7940 feet amsl. Blooms April-September.	No	**Not Expected:** Habitats preferred by this species are nor present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
Muilla coronata crowned muilla	4.2 G3 S3	Perennial bulbiferous herb. Occurs in Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub, and chenopod scrub. Known elevations range from 2,200 to 6,430 feet amsl. Blooming period is March through April (May).	No	**Not Expected:** Habitats preferred by this species are nor present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
Puccinellia simplex California alkali grass	1B.2 G2 S2	Annual herb. Occurs in alkaline soils, flats, lake margins, or vernally mesic soils within chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pool habitats. Found at elevations ranging from 5 to 3,050 feet amsl. Blooming period is March through May.	No	**Not Expected:** The habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.

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 – Watch List.

Threat Ranks

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

.3 Not very threatened in California (less than 20% of occurrences threated / low degree and immediacy of threat or no current threats known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Infraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

G1/T1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2/T2 Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3/T3 Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4/T4 Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 Secure – Common; widespread and abundant.

GNR Unranked – Global rank not yet assessed.

S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.

S2 Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.

S3 Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

SNR Unranked – State conservation status not yet assessed.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Species Observed On-site**	**Potential to Occur**
Agelaius tricolor tricolored blackbird	ST SSC G1G2 S1S2	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate freshwater marsh dominated by cattails (*Typha* spp.), willows (*Salix* spp.), and bulrushes (*Schoenoplectus* spp.), and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	No	**Not Expected:** This species is not expected to occur due to limited access to open water and suitable nesting substrate.
Anniella pulchra northern California legless lizard	SSC G3 S3	Typical habitat consists of sandy or loose loamy soils under sparse vegetation in chaparral, coastal dunes, and coastal scrub. Prefers soils with high moisture content.	No	**Moderate:** Desert scrub habitat potentially suitable for this species occurs in the project site. A record from approximately 4.5 miles southwest of the project site from approximately 35 years ago was identified by the CNDDB, with additional, but older records occurring within 5 miles of the project site. Further, there are recent records from the project vicinity documented in iNaturalist (2023).
Asio flammeus short-eared owl	SSC G5 S3	Found in swamp lands, both fresh and salt, lowland meadows, and irrigated alfalfa fields. They nest on dry ground in depression concealed in vegetation. The species needs tule patches or tall grasses for nesting/daytime seclusion.	No	**Low (Foraging):** On-site habitat is marginal for foraging and this species may pass through the site looking for prey, although it is probably more likely to occur around agricultural fields wetland and riparian areas nearby. However, there are no occurrence records for this species within 5.0 miles of the project site. In addition, there is no suitable nesting habitat on-site.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Athene cunicularia burrowing owl	SSC G4 S3	Yearlong resident of California. 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.	Yes	**Present:** An unverified observation of this species was made in December 2022 during surveys unrelated to biological resources. Further, suitable desert habitats preferred by this species and potentially suitable burrows for this species are present within the the project site. However, no individuals or recent sign of the species were detected during protocol surveys conducted in 2023. There are nine (9) occurrence records for burrowing owl within a 5-mile radius of the project site and several more outside of the 5-mile range. The closest extant occurrences (Occurrence Number 1067 and 1068) were recorded in 2004, approximately 1.5-miles east of the project site. Additionally, other occurrences (Occurrence Number 1062 and 1063) were recorded in 2004, approximately 1.5-miles to the northeast of the project site.
Bombus crotchii crotch bumble bee	SCE G2 S1S2	Found from coastal California east to the Sierra-Cascade crest and south into Mexico. Primarily occurs in California, including the Mediterranean region, Pacific coast, western desert, great valley, and adjacent foothills through most of southwestern California. Has also been recorded in Baja California, Baja California Sur, and in southwest Nevada. Inhabits open grassland and scrub habitats. Primarily nests underground. Food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	No	**Not Expected:** Although marginal habitat that includes this species' food plant genera are present within the project site and this species has been documented in iNaturalist from the project vicinity within the past few years, a survey conducted in 2023 (Dudek 2023) indicates the species is unlikely to occur on-site. However, the nearest documented extant occurrence (Occurrence Number 130) for this species in the CNDDB was documented in 1971 approximately 3 miles to the southwest of the project site.
Buteo regalis ferruginous hawk	WL G4 S3S4	Occurs in open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Preys on mostly lagomorphs, ground squirrels, and mice.	No	**Low (Foraging):** The project site provides marginal foraging habitat for this winter species. Additionally, the project site generally lacks perching opportunities, and the species does not breed in California.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Buteo swainsoni Swainson's hawk	ST G5 S3	Summer migrant in southern California. 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	**Low (Foraging):** On-site habitat is marginal for foraging and this species may forage across the project site, although it is more likely to occur around agricultural fields. Additionally, the species does not breed in California. There is one known occurrence (Occurrence Number 2773) approximately 2 miles east-southeast of the project site.
Charadrius montanus mountain plover	SSC G3 S2S3	Found in short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Prefers grazed areas and areas with burrowing rodents with short vegetation, bare ground, and flat topography.	No	**Not Expected:** Suitable foraging habitats preferred by this species are not present within the project site. This species does not nest in California.
Charadrius nivosus nivosus western snowy plover	FT SSC G3T3 S3	Occurs on sandy beaches, salt pond levees and along the shores of large alkali lakes. Breeding generally occurs above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Nests typically occur in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent.	No	**Not Expected:** Suitable foraging and nesting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
Circus hudsonius northern harrier	SSC G5 S3	Yearlong resident of California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded area. In general, it prefers saltwater marshes, wet meadows, sloughs, and bogs for nesting and foraging. Nests on the ground in shrubby vegetation or patches of dense vegetation, usually at the marsh edge.	No	**Low (Foraging):** On-site habitat is marginal for foraging and this species may forage across the site, although it is more likely to occur around agricultural fields and open grasslands. However, there are no occurrence records for this species within 5.0 miles of the project site. In addition, there is no suitable nesting habitat on-site.
Corynorhinus townsendii Townsend's big-eared bat	SSC G4 S2	An uncommon species throughout California, it is known to be found in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. The species is extremely sensitive to human disturbance.	No	**Not Expected:** Suitable foraging and roosting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
***Danaus plexippus plexippus* pop. 1** monarch – California overwintering population	FE G4T1T2Q S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No	**Not Expected:** Suitable foraging and roosting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Falco columbarius merlin	WL G5 S3S4	Winter resident of southern California. Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds. This species does not breed in California.	No	**Low (foraging):** There are numerous records of this species occurring around the project site in eBird (eBird 2023). However, the project site generally lacks perching opportunities, and this species only occurs in the region during the winter and does not breed in California.
Gopherus agassizii desert tortoise	FT ST G3 S2S3	Can be found in a wide variety of habitats, such as alluvial fans, desert washes, canyons, and saltbush plains; most tortoises in the Mojave Desert are usually associated with creosote bush scrub on alluvial fans and bajadas. Wildflowers, grasses, and in some cases, cacti make up the bulk of their diet. Some of the more common forbs consumed by the tortoise include desert dandelion (*Malacothrix glabrata*), primrose (*Camissonia* spp. and *Oenothera* spp.) desert plantain (*Plantago ovata*), milkvetches (*Astragalus* spp.), gilia (*Gilia* spp.), desert marigold (*Baileya multiradiata*), Mojave lupine (*Lupinus odoratus*), phacelia (*Phacelia* spp.), desert wishbone-bush (*Mirabilis laevis*), lotus (*Lotus* spp.), forget-me-knots (*Cryptantha* spp.), goldfields (*Lasthenia californica*), California coreopsis (*Leptosyne californica*), white-margin sandmat (*Euphorbia albomarginata*), and the introduced red stemmed filaree (*Erodium cicutarium*).	No	**Low:** There is marginal suitable habitat on-site. However, the closest known extant population (Occurrence Number 1) is over 10-miles west and northwest near Edwards Air Force Base. Additionally, the project site is at the southwestern edge of the species geographic range and is not far removed from developed areas to the south.
Gymnogyps californianus California condor	FP FE SE G1 S2	Current distribution of California condor is considered to be all of the Los Padres National Forest and western half of the Angeles National Forest (USDA Forest Service 2000), with some occasionally found in the Sequoia National Forest. Nest sites are typically located in chaparral, conifer forest, or oak woodland habitats. Nest sites are in cliff caves in the mountains. Some have nested in large cavities within sequoias *(Sequoiadendron giganteum*).	No	**Not Expected:** Suitable foraging and roosting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
Haliaeetus leucocephalis bald eagle	SE FP G5 S3	Locally common yearlong resident of southern California. Typically prefer areas near large water bodies such as sea coasts, coastal estuaries and inland lakes and rivers, in many areas, these birds are found within two miles of a water source. Most populations, specifically those in northern regions, migrate to southern, milder climates annually. Generally, these birds nest in the canopy of tall, coniferous trees, surrounded by smaller trees. They have been reported nesting on the ground, on cliffs, on cellular phone towers, on electrical poles and in artificial nesting towers.	No	**Not Expected:** Suitable foraging and roosting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Lanius ludovicianus loggerhead shrike	SSC G4 S4	Yearlong resident of California. 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. Nests in branches up to 14 feet above the ground frequently in a shrub with thorns or with tangled branching habitats.	Yes	**Present:** One individual of this species was observed within the project site during the general survey conducted in November 2022.
Phrynosoma blainvillii coast horned lizard	SSC G3G4 S4	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g., fire, floods, unimproved roads, grazing lands, and 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	**Not Expected:** Loose, fine sandy soils preferred by this species are not present within the project site. The project site primarily consists of compacted surface soils which likely precludes this species from occurring. Further, the known occurrence record (Occurrence Number 147) within 5.0 miles of the project site was recorded in 1964. However, the soil is compacted and hard due to tilling and continual abatement disturbances and provides no vegetative cover.
Plegadis chihi white-faced ibis	WL G5 S3S4	Locally rare resident/migrant in southern California. Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.	No	**Not Expected:** Suitable foraging and nesting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.
Vireo bellii pusillus least Bell's vireo	FE SE G5T2 S2	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet (0.6 to 3.0 meters) above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	No	**Not Expected:** Suitable foraging and nesting habitats preferred by this species are not present within the project site. Additionally, there are no occurrence records for this species within 5.0 miles of the project site.

Table C-2: Special-Status Wildlife Species

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Species Observed On-site	Potential to Occur
Xerospermophilus mohavensis Mohave ground squirrel	ST G2G3 S2S3	Restricted to the Mojave Desert in creosote bush scrub (most common), desert saltbush scrub, desert sink scrub, desert greasewood scrub, shadscale scrub, Joshua tree woodland, and annual grasslands. Prefers deep, sandy to gravelly soils on flat to moderately sloping terrain; species tends to avoid rocky areas and is not known to occupy areas of desert pavement. May consume leaves, forbs, shrubs, and grasses of several species and genera, including creosote (*Larrea tridentata*), winter fat (*Krascheninnikovia lanata*), spiny hop sage (*Grayia spinosa*), freckled milk vetch (*Astragalus lentiginosus*), white mallow (*Eremalche exilis*), wooly marigold (*Baileya pleniradiata*), lilac sunbonnet (*Langloisia setosissima*), Mojave monardella (*Monardella exilis*), saltbush, gilia, golden linanthus (*Linanthus aureus*), and Mediterranean grass (*Schismus arabicus*), as well as seeds of box thorn (*Lycium* spp.).	No	**Not Expected:** There is marginal suitable habitat on-site. Although there is 1 occurrence record for this species within 5-miles of the project site and 2 outside of 5-miles, this species has not been trapped in Los Angeles County outside of Edwards Air Force Base in over 30 years (Leitner 2015).

* **U.S. Fish and Wildlife Service (USFWS)**

FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.

FT Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

FC Candidate – any species which has been designated as a candidate eligible for considering to be listed under the Federal Endangered Species Act.

California Department of Fish and Wildlife (CDFW)

SE Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

ST Threatened – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required under the California Endangered Species Act.

SCE The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.

FP Fully Protected – any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.

SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:

- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

WL Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which

do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Infraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

G1/T1	Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2/T2	Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3/T3	Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4/T4	Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5	Secure – Common; widespread and abundant.
GNR	Unranked – Global rank not yet assessed.
S1	Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2	Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.
S3	Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
SNR	Unranked – State conservation status not yet assessed.

Appendix D Rare Plant Survey Report

Michael Baker INTERNATIONAL

We Make a Difference

August 8, 2023 JN 192691

NORTHPOINT DEVELOPMENT
Attn: *Jack Lac*
3315 N. Oak Trafficway
Kansas City, MO 64116

SUBJECT: Results of Rare Plant Surveys for the Antelope Valley Logistics Center - West Project, Los Angeles County, California

Dear Mr. Lac:

Michael Baker International (Michael Baker) is pleased to submit this report to Northpoint Development documenting the results of rare plant surveys conducted for the Antelope Valley Logistics Center - West Project (project) located in unincorporated Los Angeles County, California. Michael Baker biologists conducted rare plant surveys during the 2023 blooming season to document the presence or absence of special-status[1] plant species that were determined to have a potential to occur within the project site, also referred to as the survey area.

Project Location

The project site is located in unincorporated Los Angeles County, north of the City of Lancaster. It is generally located north of West Avenue G, east of Sierra Highway, south of West Avenue F, and west of State Route 14 (refer to Figure1, *Regional and Project Vicinity*). The project site is depicted in Section 33 of Township 8 North, Range 12 West, on the U.S. Geological Survey's (USGS) *Lancaster West*, *California* 7.5-minute quadrangle. The site encompasses approximately 119 acres and is bounded by undeveloped land on all sides (refer to Figure 2, *Project Vicinity*, in Attachment A).

Project Description

The proposed project would include construction of two speculative industrial short-term storage warehouse buildings. Each new building would consist of approximately 1,004,000 square-foot building footprint, which includes approximately 40,000 square feet of office space. Each building will have dedicated 82 truck loading docks, 222 trailer parking stalls, and 861 passenger vehicle parking spaces. The project proposes to enhance the local economy and municipal revenue, and furnish local employment

[1] As used in this report, "special-status" refers to plant species that are federal or State-listed, proposed, or candidates; plant species that have been designated a California Rare Plant Rank by the California Native Plant Society; and State/locally rare plant species.

5 Hutton Centre Drive, Suite 500 | Santa Ana, CA 92707
Office: 949-472-3505 | Fax: 949-472-8373

opportunities for residents, consistent with the goals of the Town & County Antelope Valley Area Plan.

To provide access to the project site, Avenue F would be partially improved by the project proponent along the northly property boundary in addition to partial improvements of 20th Street West along the westerly property boundary and Avenue F-8 along the southernly boundary and full improvements of a new proposed public road on the east side of the property (refer to Figure 3b, *Project Site and Survey Area*). Additional ancillary improvements such as landscaping and utility work would also be required.

Methodology

Literature Review

Prior to field surveys, Michael Baker conducted a literature review and records search for special-status plant species documented within 5 miles of the survey area. Previously recorded occurrences of special-status plant species within a 5-mile radius in the USGS *Lancaster East, Lancaster West, Rosamond Lake, and Rosamond, California* 7.5-minute quadrangles were identified through a query of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; CDFW 2023a) and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2023a). In addition, a Species List was generated utilizing the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation project planning tool (IPaC) (USFWS 2023).

The current conservation status of plant species was verified through lists and resources provided by the CDFW, specifically the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023b) and the *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (CDFW 2023c). In addition, Michael Baker reviewed previously prepared reports, survey results, and literature, as available, detailing the biological resources previously observed on or within the vicinity of the survey area to gain an understanding of existing site conditions, confirm previous species observations, and note the extent of any disturbances that have occurred within the survey area that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status species, as well as the following resources:

- *A Manual of California Vegetation, Online Edition* (CNPS, 2023b)
- *California Sensitive Natural Communities* (CDFW 2023d)
- *Custom Soil Resource Report for Antelope Valley Area, California* (United States Department of Agriculture [USDA] 2023)
- Google Earth Pro Historical Aerial Imagery from 2003 to 2023 (Google, Inc. 2023)
- *Biological Resources Assessment for an Industrial Warehouse Facility in Antelope Valley, Los Angeles County, California* (Rincon Consultants, Inc [Rincon] 2022)
- Calflora: Information on California plants for education, research and conservation (Calflora 2023)

In total, 15 special-status plant species were identified during reviews of the CNDDB, CIRP, Calflora and IPaC, and were the focus of rare plant surveys. The potentials for special-status species to occur within the survey area were determined based on known occurrence records and the following:

- **Present**: Species was observed or detected within the survey area during the field survey.

- **High**: Occurrence records (within 20 years) indicate that the species has been known to occur on or within 1 mile of the survey area and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the survey area and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- **Moderate**: Occurrence records (within 20 years) indicate that the species has been known to occur within 1 mile of the survey area and the site is within the normal expected range of this species. There is suitable habitat within the survey area, but the site is ecologically isolated from any local known extant populations or sightings.
- **Low**: Occurrence records (within 20 years) indicate that the species has been known to occur within 5 miles of the survey area, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the survey area.
- **Not Expected**: There are no occurrence records of the species within 5 miles of the survey area, there is no suitable habitat within the survey area, and/or the survey area is outside of the normal expected range for the species.

All special-status species identified are summarized in Table 1 below.

Table 1: Potentially Occurring Special-Status Plant Species

Scientific Name Common Name	**Federal/ State/CRPR**	**Habitat Preferences and Distribution Affinities**	**Potential to Occur**
Astragalus preussii* var. *laxiflorus Lancaster milk-vetch	None/None/1B.1	Perennial herb. Habitats include chenopod scrub. Found at 2295 feet amsl. Blooming period is March through May.	**Low:** While potentially suitable habitat for this species is present in the project site, only one occurrence record was documented 2.18 miles away from the project site in 1902 (121 years ago).
Calochortus striatus Alkali-mariposa lily	None/None/1B.2	Perennial bulbiferous herb. Habitats include chaparral, chenopod scrub, meadows and seeps, and Mojavean desert scrub. Found at elevations ranging from 230 to 5,235 feet amsl. Blooming period is April through June.	**Present:** This species was detected in the project site during 2023 rare plant surveys.
Calystegia peirsonii Peirson's morning-glory	None/None/4.2	Perennial rhizomatic herb. Habitats include chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Found at elevations ranging from 100 to 4,920 feet amsl. Blooming period is April through June.	**Not expected:** There are no known records of this species within five miles of the project site.

Scientific Name Common Name	**Federal/ State/CRPR**	**Habitat Preferences and Distribution Affinities**	**Potential to Occur**
Canbya candida white pygmy-poppy	None/None/4.2	Annual herb. Habitats include Joshua tree "woodland", Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 1,970 to 4,790 feet amsl. Blooming period is March through June.	**Not expected:** One occurrence record was documented 2.18 miles away from the project site with no survey date. The occurrence was last updated in 1995 (28 years ago).
Castilleja plagiotoma Mojave paintbrush	None/None/4.3	Perennial herb (hemiparasitic). Habitats include Great Basin scrub (alluvial), Joshua tree "woodland", lower montane coniferous forest, and pinyon and juniper woodland. Found at elevations from 985 to 8,205 feet amsl. Blooming period is from April through June.	**Not expected:** There are no known records of this species within five miles of the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	None/None/1B.1	Annual herb. Habitats include chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations ranging from 900 to 4,005 feet amsl. Blooming period is April through June.	**Not expected:** One occurrence record was documented 2.18 miles away from the project site in 1896 (127 years ago).
Chorizanthe spinosa Mojave spineflower	None/None/4.2	Annual herb. Habitats include chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, and playas. Found at elevations ranging from 20 to 4,265 feet amsl. Blooming period is March through July.	**Present:** This species was detected in the survey area during the 2023 rare plant surveys.
Eriastrum rosamondense Rosamond eriastrum	None/None/1B.1	Annual herb. Habitats include chenopod scrub (openings) and vernal pools (edges). Found at elevations ranging from 2,295 to 3,855. Blooming period is April through May.	**High:** CNDDB and Calflora **records of** this species have been made from within 2 miles of the project site in the past 12 years and the project contains chenopod scurb habitat preferred by this species.
Eriophyllum mohavense Barstow woolly sunflower	None/None/1B.2	Annual herb. Habitats include chenopod scrub, Mojavean desert scrub, and playas. Found at elevations ranging from 1,640 to 3,150 feet amsl. Blooming period is March through May.	**Not expected:** There are no known records of this species within five miles of the project site.

Scientific Name Common Name	**Federal/ State/CRPR**	**Habitat Preferences and Distribution Affinities**	**Potential to Occur**
Goodmania luteola Golden goodmania	None/None/4.2	Annual herb. Habitats include meadows and seeps, mojavean desert scrub, playas, and valley and foothill grassland. Found at elevations ranging from 65 to 7,220 feet amsl. Blooming period is April through August.	**High:** Calflora observations for this species were made in 2016 (7 years ago) 2 miles away from the project site and the site contains desert scrub habitat preferred by this species.
Loeflingia squarrosa* var. *artemisiarum Sagebrush loeflingia	None/None/2B.2	Annual herb. Habitats include desert dunes, Great Basin scrub, and Sonoran Desert scrub. Found at elevations ranging from 2,295 to 5,300 feet amsl. Blooming period is April through May.	**Not expected:** One occurrence record was documented within 1 mile of the project site in with no survey date. The occurrence was last updated in 1996 (27 years ago).
Monardella exilis Mojave monardella	None/None/4.2	Annual herb. Habitats include chenopod scrub, desert dunes, Great Basin scrub, Joshua tree "woodland", lower montane coniferous forest, Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 1,970 to 6,725 feet amsl. Blooming period is April through September.	**Not expected:** There are no known records of this species within five miles of the project site.
Muilla coronata Crowned muilla	None/None/4.2	Perennial bulbiferous herb. Habitats include chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 2,200 to 6,430 feet amsl. Blooming period is March through April.	**Not expected:** There are no known records of this species within five miles of the project site.
Puccinellia simplex California alkali grass	None/None/1B.2	Annual herb. Habitats include chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 5 to 3,050 feet amsl. Blooming period is March through May.	**Not expected:** There are no known records of this species within five miles of the project site.
Yucca brevifolia Western Joshua tree	None/CC/None	Tree. Habitats include Joshua tree woodland. Found at elevations ranging from 1,312 to 7,545 feet amsl. Blooming period is March through May.	**Low:** One calflora observation for this species was made in 2019 (4 years ago) 4.5 miles away from the project site.

Scientific Name Common Name	Federal/ State/CRPR	Habitat Preferences and Distribution Affinities	Potential to Occur
Source: CDFW 2023a; CNPS 2023b; USFWS 2023a; Calflora 2023. **Status Legend** **State** CC: Candidate for state listing. **CRPR (California Rare Plant Rank)** List 1B: Plants rare, threatened, or endangered in California and elsewhere. List 2B: Plants rare, threatened, or endangered in California but common elsewhere. List 4: Plants of limited distribution – Watch List. **Threat Rank:** .1 Seriously threatened in California — Over 80% of occurrences threatened / high degree and immediacy of threat. .2 Moderately threatened in California — 20-80% of occurrences threatened / moderate degree and immediacy of threat. .3 Not very threatened in California — Less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known.			

Field Surveys

Michael Baker biologists conducted the 2023 rare plant surveys during the peak blooming periods for plant species occurring in the Antelope Valley region. All surveys were conducted in accordance with accepted survey protocols and guidelines (CDFW 2018; CNPS 2001) using systematic field techniques across all habitats within the survey area to ensure thorough coverage of the entire project site. Special-status species, as detected, were mapped using GPS devices. Small populations (generally less than 50 individuals with negligible acreage) were quantified using clicker counters and GPS point data was recorded. Polygons were mapped for larger populations. One or multiple survey plots were taken within each polygon. Special-status species were quantified within each survey plot and counts were extrapolated for the overall polygon. Refer to Table 1 below for a summary of the survey dates, timing, surveyors, and weather conditions.

Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions

Date	Time (start / finish)	Surveyors*	Weather Conditions	
			Temperature (°F) (start / finish)	Wind Speed (mph) (start / finish)
May 1, 2023	0830 / 1230	TM, OE, MS	56 sunny / 64 sunny	16 - 23
May 23, 2023	0626 / 1049	TM, SM	66 sunny / 85 sunny	8 - 11
June 16, 2023	0900 / 1030	TM, AN, MS	60 cloudy / 63 cloudy	11 - 13
* TM=Trina Ming, OE = Oscar Escobar, MS = Marisol Sanchez, SM = Sammy Martinez, AN = April Nakagawa				

The surveys were floristic in nature, indicating that all plants observed were identified to the lowest taxonomic level necessary to determine rarity or listing status. Plant nomenclature used in this report follows the *Jepson eFlora* (Jepson Flora Project 2023) and scientific names are provided immediately following common names of plant species (first reference only). Vegetation communities were mapped and classified to the alliance level in accordance with *A Manual of California Vegetation, Online Edition* (CNPS 2023b). Geographic Information Systems (GIS) ArcGIS Pro software was then used to digitize the mapped vegetation communities and display these data onto an aerial photograph.

Higher than average amounts of rainfall were recorded in the region during the 2022/2023 wet season. The average seasonal rainfall at William J. Fox Airfield, approximately two miles west of the project site, is

6.68 inches; the 2022-2023 season total was 7.47 inches (Los Angeles Almanac 2023a). Rainfall occurring during the months of the survey (May and June 2023) totaled 0.12 and 0.00 inches, respectively (Los Angeles Almanac 2023b). Such conditions lead to exceptional plant growth during the 2023 spring months and likely lead an above-average number of rare plants to germinate than would be expected during a typical blooming season.

Existing Conditions

The project site is vacant and void of any structures. Homeless encampments and illegal dumping occur within the western third of the project site in the vicinity of 20th Street West, and occasional off-road vehicle tracks are present throughout the project site. The site is generally flat and lies at an elevation of approximately 2,305 to 2,311 feet above mean sea level, with a gentle downward slope towards the north-east. Refer to Attachment B for representative photographs of the survey area taken during the field surveys.

According to the *Custom Soil Resource Report for Antelope Valley Area, California* (USDA 2023), the survey area is underlain by one soil unit: Pond-oban complex (Px). Based on a review of Google Earth Pro aerial imagery from 2003 to 2023 (Google, Inc. 2023) and results from the field surveys, it was determined that the survey area consists of and is surrounded by undeveloped open land.

Survey Results

One (1) natural vegetation community, disturbed *Atriplex confertifolia* Shrubland Alliance (*Atriplex confertifolia – Atriplex polycarpa* Association), was mapped within the survey area. In addition, the project site contains one (1) land cover type classified as disturbed. These vegetation communities and land cover types are identified in Table 2 below and depicted on Figure 3, *Vegetation Communities and Land Cover Types*, in Attachment A.

Table 2: Vegetation Community within the Survey Area

Vegetation Community/Land Cover Type	Acreage[2]
Disturbed Shadcale Scrub (*Atriplex confertifolia* Shrubland Alliance)	116.86
Disturbed habitat	1.69
TOTAL	**118.55**

Special-Status Vegetation Communities

No special-status vegetation communities, as designated by CDFW (2023d), are present within the survey area. Disturbed shadscale scrub habitat and disturbed habitat consisting of bare ground or a sparse cover of non-native weedy species and an occasional individual native scrub are present on-site.

Special-Status Plant Species

A total of 30 plant species were observed within the survey area during the 2023 rare plant surveys, each identified to the lowest taxonomic level necessary to determine rarity or listing status. Of those, 70 percent

[2] Total may not equal sum due to rounding.

(21 species) are native species. Refer to Attachment C for a complete list of plant species observed during the 2023 rare plant surveys.

Two special-status plant species were detected during the 2023 rare plant surveys, including alkali mariposa lily (*Calochortus striatus,* California Rare Plant Rank [CRPR] 1B.2) and Mojave spineflower (*Chorizanthe spinosa,* CRPR 4.2). Two species were determined to have a high potential to occur, including Rosamond erisatrum (*Erisatrum rosamondense,* CRPR 1B.1) and golden goodmania (*Goodmania luteola,* CRPR 4.2). Both of these species have CNDDB and/or Calflora records from within 2 miles of the project site and from within the past 20 years. Western Joshua tree (*Yucca brevifolia*, a candidate for State-listing) was determined to have a low potential to occur due to the presence of this species in the Antelope Valley. Surveyors remained especially alert for the presence of species with a potential to occur during focused rare plant surveys. No plant species listed as threatened, endangered, or as a candidate species under the federal Endangered Species Act or the California Endangered Species Act were observed within the survey area. Table 3 below provides the results of the count and acreage quantities determined for each special-status species present on-site.

Table 3: Special-Status Plant Survey Results

Scientific Name	Common Name	Count	Acreage[3]
Calochortus striatus	alkali mariposa lily	16	N/A
Chorizanthe spinosa	Mojave spineflower	4,179,468	15.16

Potential Impacts

Based on the survey results and project description, implementation of the project would result in direct impacts to alkali mariposa lily (CRPR 1B.2) and Mojave spineflower (CRPR 4.2) (refer to Figure 4, *Survey Results* in Attachment A). At this time, it is anticipated that the entire project site would be disturbed, resulting in the removal of all individual special-status plant species.

Conclusions and Recommendations

The project has the potential to impact up to 16 individual alkali mariposa lily and up to 4,179,468 individual Mojave spineflower covering 15.16 acres. Impacts to alkali mariposa lily, a species with a CRPR of 1B.2, would be considered significant under CEQA and as such would require mitigation to reduce impacts to below a level of significance. However, only a total of 16 individual alkali mariposa lily, covering a negligible area, were recorded within the survey area. While such impacts on their own may be considered de minimis, with other special-status species present on-site, mitigation for impacts to alkali mariposa-lily may be achieved in conjunction with compensatory mitigation implemented for impacts to other special-status species mapped on-site (i.e. Mojave spineflower).

Mojave spineflower is a special-status species with a CRPR of 4.2; species with a CRPR of 3 or 4 generally do not require evaluation under CEQA when small numbers or areas of such species are impacted. However, given the quantity of Mojave spineflower present on-site, an evaluation of this CRPR 4 species under CEQA may be warranted and mitigation for impacts to the species ultimately required. On or off-site preservation

[3] As noted in the *Field Surveys* portion of this report, areas containing small numbers of rare plant individuals (generally less than 50 individuals with a negligible acreage) were mapped using points rather than polygons and therefore are accounted for in the count section of the table.

of habitat occupied by the special-status plant species detected on-site, via an in-lieu fee program administered by an agency-approved mitigation bank is anticipated and would provide appropriate compensatory mitigation for impacts to Mojave spineflower.

Please feel free to contact me at (949) 472-3495 or at trina.ming@mbakerintl.com with any questions you may have regarding the results and/or recommendations provided in this report.

Sincerely,

Trina Ming
Biologist
Natural Resources

Attachments:

A. *Project Figures*
B. *Site Photographs*
C. *Plant Species Observed List*
D. *References*

Attachment A

Project Figures

8/7/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Michael Baker INTERNATIONAL

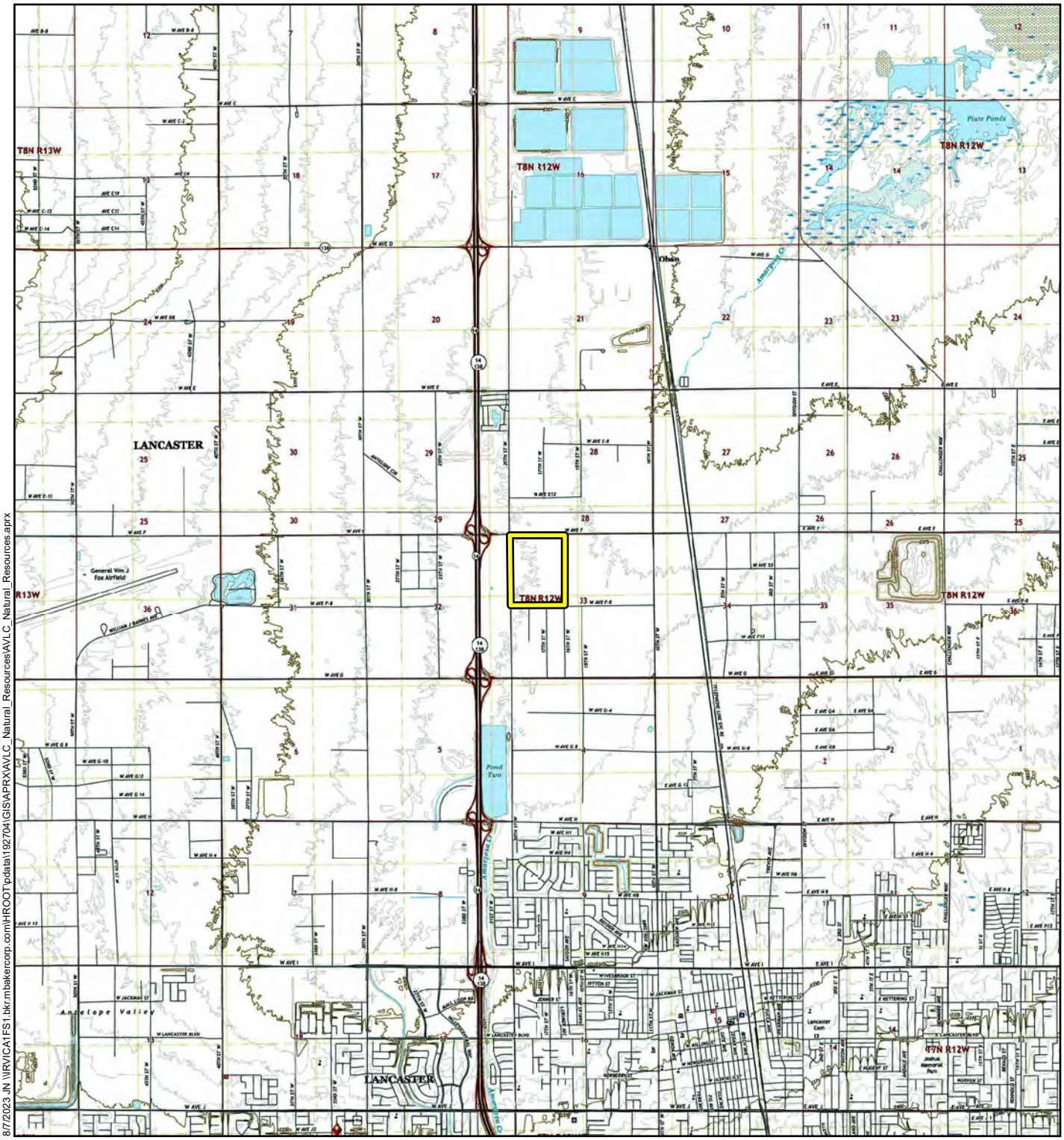
0 2.5 5 Miles

Source: ArcGIS Online, 2018

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
RARE PLANT SURVEY REPORT

Regional Vicinity

Figure 1



8/7/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

Project Site (118.55 acres)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
RARE PLANT SURVEY REPORT

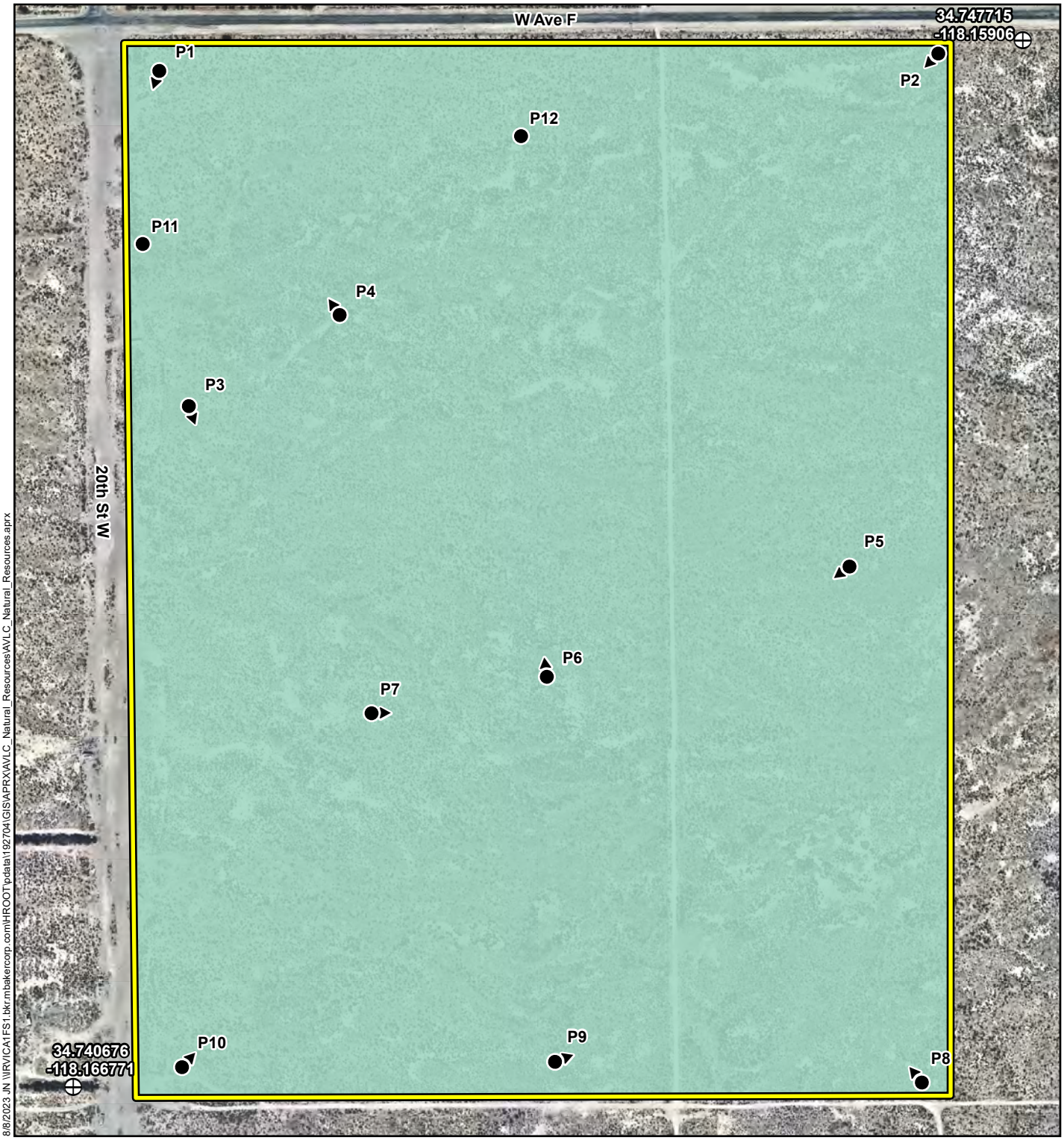
Project Vicinity

Michael Baker INTERNATIONAL

0 0.5 1 Miles

Source: USGS 7.5-Minute topographic quadrangle maps: *Lancaster East, Lancaster West, Rosamond (2022), and Rosamond Lake (2021)*

Figure 2



8/8/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

- Project Site (118.55 acres)
- Reference Point
- Disturbed Shadscale Scrub (*Atriplex confertiflora* Shrubland Alliance, 118.55 acres)
- Photograph Point and Direction

Michael Baker INTERNATIONAL

0 175 350 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
RARE PLANT SURVEY REPORT

Vegetation Communities and Other Land Uses

Figure 3

8/8/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

- Project Site (118.55 acres)
- Reference Point
- Alkali Mariposa Lily (*Calochortus striatus*)
- Mojave Spineflower (*Chorizanthe spinosa*)
- Mojave Spineflower (15.16 acres)

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0 175 350 Feet

Source: Esri/Maxar (10/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
RARE PLANT SURVEY REPORT

Survey Results

Figure 4

Attachment B

Site Photographs

Photo 1: Standing at the northwestern portion of the survey area facing south.

Photo 2: Standing at the northeastern portion of the survey area facing southwest.

Photo 3: Standing at the northwestern portion of the survey area, south of Photo 1, facing southeast.

Photo 4: Standing at the northwestern portion of the survey area facing north.

Photo 5: Standing within the central eastern portion of the survey area facing southwest.

Photo 6: Standing at the central portion of survey area facing north.

Photo 7: Standing at the central western portion of the survey area facing east.

Photo 8: Standing at the southeastern section of the site facing north.

Photo 9: Standing at the central southern portion of the site facing northeast.

Photo 10: Standing at the southwestern portion of the site facing northeast.

Photo 11: Close up photograph of alkali mariposa lily taken prior to blooming. This species was later identified following blooming.

Photo 12: Close up photograph of Mojave spineflower.

Additional photo 1: Close up photograph of a blooming alkali mariposa lily taken on the adjoining property.

Additional photo 2: Close up photograph of blooming Mojave spineflower taken on the adjoining property.

Attachment C

Plant Species Observed List

Table D-1: Plant Species Observed List

*Scientific Name**	Common Name	Cal-IPC Rating**	CRPR***
Amsinckia sp.	fiddleneck		
*Atriplex prostrata**	fat-hen		
Atriplex confertifolia	shadscale		
Atriplex lentiformis	big saltbush		
Atriplex polycarpa	allscale saltbush		
*Bromus madritensis**	Spanish brome	High	
Bromus sp.*	brome		
Calochortus striatus	alkali mariposa lily		1B.2
Centromadia pungens ssp. *pungens*	common spikeweed		
Chorizanthe spinosa	Mojave spineflower		4.2
Chylismia claviformis	clavate fruited primrose		
Cryptantha sp.	cryptantha		
*Descurainia sophia**	flix weed	Limited	
Eriogonum sp.	buckwheat		
*Erodium cicutarium**	coastal heron's bill	Limited	
Forestiera pubescens	desert olive		
Frankenia salina	alkali heath		
*Hordeum murinum**	wall barley	Moderate	
Lepidium fremontii	desert pepperweed		
*Lepidium perfoliatum**	clasping pepperweed		
Lycium andersonii	Anderson thornbush		
Malacothrix coulteri	snake's-head		
Matricaria discoidea	pineapple weed		
Mentzelia albicaulis	whitestem blazingstar		
Pectocarya penicillata	northern pectocarya		
Phacelia fremontii	Fremont's phacelia		
*Schismus barbatus**	common mediterranean grass	Limited	
Tamarix sp.*	salt cedar	High	
Tetradymia axillaris	catclaw horsebrush		
Uropappus lindleyi	silver puffs		

* Non-native species

** **California Invasive Plant Council (Cal-IPC) Ratings**

High — These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate — These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited — These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate

rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

*** **California Rare Plant Rank**

1B Plants rare throughout their range with the majority endemic to California

Threat Ranks

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

4 Plants of limited distribution – Watch List.

Threat Ranks

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

Attachment D

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END OF DOCUMENT

Appendix E Burrowing Owl Survey Report

Michael Baker
INTERNATIONAL

We Make a Difference

November 16, 2023 JN 192691

NORTPOINT DEVELOPMENT
Attn: *Jack Lac*
3315 North Oak Trafficway
Kansas City, MO 64116

SUBJECT: Results of Focused Burrowing Owl (*Athene cunicularia*) Habitat Assessment for the Proposed Antelope Valley Logistics Center - West Project – Unincorporated Los Angeles County, California

Dear Mr. Lac:

This report has been prepared to document the results of a focused burrowing owl (*Athene cunicularia*; BUOW) habitat assessment and burrow surveys that were conducted by Michael Baker International (Michael Baker) during the 2023 breeding season for the proposed Antelope Valley Logistics Center – West (project or project site) located in unincorporated Los Angeles County, California. Based on the results of Michael Baker's initial review of the California Natural Diversity Database (CDFW 2023), there are multiple records of BUOW in the project vicinity. As such, focused BUOW surveys were conducted during the 2023 breeding season (February 1 through August 31) to document the presence/absence of BUOW within the project site and suitable habitat within 500 feet (survey area) in accordance with the *Staff Report on Burrowing Owl Mitigation* (*Staff Report*) (California Department of Fish and Game [CDFG] 2012). The focused BUOW habitat assessment/burrow survey was conducted on March 8 and March 28, 2023, during the species breeding season to document any suitable habitat within the project site.

Project Location

The project site is generally located north of West Avenue G, east of Sierra Highway, south of West Avenue F, and west of State Route 14 in an unincorporated area of Los Angeles County, California (refer to Figures 1 and 2, *Regional Vicinity* and *Site Vicinity*). The project site is depicted in Section 33 of Township 8 North, Range 12 West, on the U.S. Geological Survey's (USGS) *Lancaster West*, *California* 7.5-minute quadrangle. The site encompasses approximately 119 acres

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(refer to Figures 3a and 3b, *Project Site and Survey Area*).

Project Description

The proposed project would include construction of two speculative industrial short-term storage warehouse buildings. Each new building would consist of approximately 1,004,000 square-foot building footprint, which includes approximately 40,000 square feet of office space. Each building will have dedicated 82 truck loading docks, 222 trailer parking stalls, and 861 passenger vehicle parking spaces; refer to Exhibits 2-3, Conceptual Site Plan. The project proposes to enhance the local economy and municipal revenue, and furnish local employment opportunities for residents, consistent with the goals of the Town & County Antelope Valley Area Plan.

To provide access to the project site, Avenue F would be partially improved by the project proponent along the northly property boundary in addition to partial improvements of 20th Street West along the westerly property boundary and Avenue F-8 along the southernly boundary and full improvements of a new proposed public road on the east side of the property (refer to Figure 3b, *Project Site and Survey Area*). Additional ancillary improvements such as landscaping and utility work would also be required.

Species Background

Burrowing Owl

The BUOW is a grassland specialist distributed throughout western North America, where it is known to occupy a wide variety of arid and semi-arid open areas within shrub, desert, and grassland environments. The California Department of Fish and Wildlife (CDFW) currently lists the BUOW as a California Species of Special Concern. BUOWs require large open, sparsely vegetated areas, on rolling or level terrain with an abundance of fossorial mammal burrows (> 4 inches in diameter). In addition, BUOWs require open vegetation allowing open line-of-sight of the surrounding habitat to forage as well as watch for predators. BUOWs are dependent upon the presence of burrowing mammals (e.g., California ground squirrel [*Otospermophilus beecheyi*], coyote [*Canis latrans*], American badger [*Taxidea taxus*]) whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of fossorial mammal burrows is often a major factor that limits the presence or absence of BUOW. Where mammal burrows are scarce, BUOWs have been observed digging their own burrows in soft, friable soil and have been observed utilizing man-made cavities such as buried and non-functioning drainpipes, standpipes, and dry culverts. Additionally, BUOWs may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Adult BUOWs are small owls (approximately 7.5 to 9.8 inches) with long legs and short tails that are speckled brown and white, with yellow eyes and yellow bill. A bold white throat and eyebrows are also typical distinguishing features for BUOWs. Juvenile BUOWs are usually less mottled than adults, with buffy-yellow underparts. BUOWs have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. One burrow is typically selected for use as the main

nest burrow, however, BUOWs also utilize satellite burrows that are often located within the immediate vicinity of the main nest burrow. BUOWs prey upon invertebrates and small vertebrates through the low growing vegetation which allows for foraging visibility (Thomsen 1971). They typically forage in short grass, mowed, or overgrazed pasture, golf courses and airports (Thomsen 1971). Based on the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), the BUOW breeding season in California extends from February 1 through August 31. BUOWs in California may migrate southerly, but often remain in their breeding area during the non-breeding months. The BUOW was once abundant and widely distributed within southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino.

Regulatory Framework

Migratory Bird Treaty Act

The BUOW is a resident and migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA reflects agreements made between the U.S., England, Mexico, the former Soviet Union, and Japan to protect all of North America's migratory bird populations. The MBTA protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. The other prohibitions (i.e., capture, pursue, hunt, and kill) of the MBTA are inapplicable to nests. The regulatory definition of take, as defined in Title 50 Code of Federal Regulations (C.F.R.) Part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests. It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. The MBTA prohibits the destruction of a nest when it contains birds or eggs, and no possession shall occur during the destruction (U.S. Fish and Wildlife Service [USFWS] 2017). Certain exceptions to this prohibition are included in Title 50 C.F.R. Section 21.

California Fish and Game Code

Pursuant to Section 3513 of the California Fish and Game Code (CFGC), the California Department of Fish and Wildlife (CDFW) enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. Additionally, BUOW is protected under Sections 3503, 3503.3, 3511, and 3513 of the CFGC which prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (March 1 through August 15, annually). Section 3503.5 of the CFGC protects birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks and owls, including BUOWs) which makes it unlawful to take, posses, or destroy their nest or eggs. Further, the *Staff Report* offers long-term assurances for conservation of this species in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan.

Methodology

The entire project site was identified as providing potentially suitable habitat and foraging opportunities for BUOW. As such, a focused habitat assessment/burrow survey and focused BUOW surveys were conducted by Michael Baker biologists John Parent, Anna Jullie, Art Popp, and Ryan Winkleman on five (5) separate

days during the 2023 breeding season in accordance with the *Staff Report* (CDFG 2012). The focused habitat assessment/burrow survey was conducted concurrently with the first focused BUOW survey on March 8, 2023, though survey efforts were stopped due do the deterioration of weather conditions and was resumed on March 28 during favorable weather conditions. Subsequent BUOW surveys were conducted on March 28, May 9, June 5, and July 6, 2023. Surveys were not conducted during rain, high winds, dense fog, or high temperatures. Please refer to Table 1 below for a summary of the survey dates, times, surveyors, and weather conditions for each of the surveys.

Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions

Date	Time (start / finish)	Surveyors*	Weather Conditions	
			Temperature (°F) (start / finish)	Wind Speed (mph)
March 8, 2023	0700 / 1000	AJ, JP, RW	45 clear / 52 clear	10 – 12
March 28, 2023	0600 / 1000	AJ, JP, AP	46 clear / 58 clear	10 – 12
May 9, 2023	0600 / 1000	JP, AJ	53 clear / 80 mostly clear	3 – 12
June 5, 2023	0600 / 0930	JP, AJ	53 mostly clear / 78 few clouds	0 – 2
July 6, 2023	0600 / 1000	JP, AJ	70 clear / 86 clear	2 – 10
*AJ = Anna Jullie, JP = John Parent, AP = Art Popp, RY = Ryan Winkleman				

The entire project site was surveyed for suitable, occupied, and remnant burrows consisting of natural and man-made structures capable of providing suitable roosting/nesting opportunities. During the focused habitat assessment/burrow survey conducted on March 8 and March 28, 2023, a systematic search for suitable burrows (> 4 inches in diameter) within all portions of the project site was conducted, including accessible areas within the 500-foot buffer lying directly east of the project site. Survey transects were spaced out at approximately 3- to 6-meter (10 to 20 feet) intervals to ensure 100% visual coverage of the entire project site. Remaining areas within the 500-foot buffer around the project site were surveyed indirectly, as access to directly survey these areas was not provided. Additionally, surveys of native desert scrub habitat adjacent to the alignment of proposed off-site improvements were also indirectly surveyed from 20th Street West. In accordance with the *Staff Report*, surveys were not conducted during rain, high winds (> 12 miles per hour), dense fog, or temperatures over 90 degrees Fahrenheit. Biologists were generally on-site between the hours of 0600 and 1000 to complete surveys across this project site.

Binoculars were used to scan areas that were inaccessible due to the lack of right-of-entry to observe and identify distant birds; identify any suitable, occupied, and remnant burrows consisting of natural and man-made substrates; and identify any activity around suitable habitat for BUOW. Methods to detect the presence of BUOWs included direct observation, aural detection, and signs of presence (i.e., pellets, whitewash, feathers, tracks, and prey remains). If detected, the location of any suitable habitat, potential burrows, sign (i.e., pellets, whitewash, feathers, or prey remains), and BUOWs observed within the survey

area are recorded and mapped using a hand-held Global Positioning System (GPS) unit.

Existing Conditions

The project site is vacant and void of any structures. Homeless encampments and illegal dumping occur within the western third of the project site in the vicinity of 20th Street West, and occasional off-road vehicle tracks are present throughout the project site. The site is generally flat and lies at an elevation of approximately 2,305 to 2.311 feet above mean sea level, with a gentle downward slope towards the north-east. Refer to Attachment B for representative photographs of the survey area taken during the field surveys.

According to the *Custom Soil Resource Report for Antelope Valley Area, California* (USDA 2023), the survey area is underlain by one soil unit: Pond-oban complex (Px). Based on a review of Google Earth Pro aerial imagery from 2003 to 2023 (Google, Inc. 2023) and results from the field surveys, it was determined that the survey area consists of and is surrounded by undeveloped open land.

The entire project site consists of one natural vegetation community, classified as disturbed shadscale scrub (*Atriplex confertifolia* Shrubland Alliance). This vegetation community is dominated by shadscale (*Atriplex confertifolia*) intermixed with low quantities of other native species including allscale saltbush (*Atriplex polycarpa*), Mojave red sage (*Neokochia californica*), catclaw horsebrush (*Tetradymia axillaris*), wild-rye (*Elymus* sp.), and alkali mariposa lily (*Calochortus striatus*). The understory consisted of a mixture of native spotted wild buckwheat (*Eriogonum* maculatum) and nonnative Spanish brome (*Bromus madritensis*), coastal heron's bill (*Erodium cicutarium*) and common mediterranean grass (*Schismus barbatus*).

Based on a review of the California Natural Diversity Database RareFind 5 there are twenty-nine (29) occurrence records for burrowing owl within the USGS *Lancaster West, Lancaster East, Roasamond Lake,* and *Rosamond California* 7.5-minute quadrangle. The closest extant CNDDB occurrence (Occurrence Number 1888) was recorded in 2013, approximately 3.70 miles southwest of the project site (CDFW 2023a). Additionally, an incidental observation of one individual BUOW was made during surveys conducted in December 2022 unrelated to biological resources.

Survey Results

No individual BUOW were observed within the project site or survey area, and although numerous potentially suitable burrows were observed within the survey area (refer to Figure 4 *Survey Results*), only one burrow with potential BUOW sign was observed during the course of all focused BUOW surveys conducted in 2023. The sign observed included several old and degraded pellets of a suitable size and shape consistent with pellets from a BUOW. No other BUOW sign was observed throughout the survey area.

Several bird species were observed during the surveys, most commonly, common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), mourning dove (*Zenaida macroura*), and American crow (*Corvus brachyrhynchos*). One special-status bird species, Bell's sparrow (*Artemisiospiza belli belli*; CDFW Watch List) was observed on-site. Several species of reptiles were also observed, most commonly Great Basin whiptail (*Aspidoscelis tigris tigris*) and western side-blotched lizard (*Uta stansburiana elegans*), as well as two mammal species; black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*). California ground squirrel, whose burrows are often utilized by BUOW, were not detected until the last survey effort on July 6, 2023. The wildlife species observed during all BUOW surveys are provided in Attachment C.

Conclusions and Recommendations

While burrows potentially suitable for BUOW were found on-site, based on results of the 2023 focused surveys, no BUOW are currently nesting on-site. No individual BUOW or recent sign of the species were detected. An incidental observation of BUOW was made on-site during a site survey conducted in December 2022 that was unrelated to biological resources.

Although BUOW is currently considered absent from the project site, with known records of BUOW in the project region, potential exists for BUOW to occur on-site prior to implementation of the proposed project. Therefore, a pre-construction clearance survey would be required to reconfirm the absence of BUOWs and maintain compliance with the MBTA and CFGC. In accordance with the *Staff Report*, a "take avoidance survey" would need to be conducted by a qualified biologist following methods described in Appendix D of the *Staff Report* no more than 14 days prior to initiating any ground disturbing activities to avoid direct take of BUOWs, including those that may occupy burrows just prior to construction. Once the survey is completed, the qualified biologist should prepare and submit a final report documenting the results of the clearance survey to CDFW for review and file. A BUOW avoidance and minimization plan should also be prepared and submitted to CDFW for approval prior to the initiation of any project activities, regardless of pre-construction survey results, to account for the presence of owls if a burrow becomes occupied after construction has commenced.

Please do not hesitate to contact me at (714) 394-5646 or john.parent@mbakerintl.com should you have any questions or require further information.

Sincerely,

John Parent
Wildlife Biologist

Attachments:

A. *Project Figures*

B. *Site Photographs*

C. *Wildlife Species Observed List*

D. *References*

Attachment A

Project Figures

8/2/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Michael Baker INTERNATIONAL

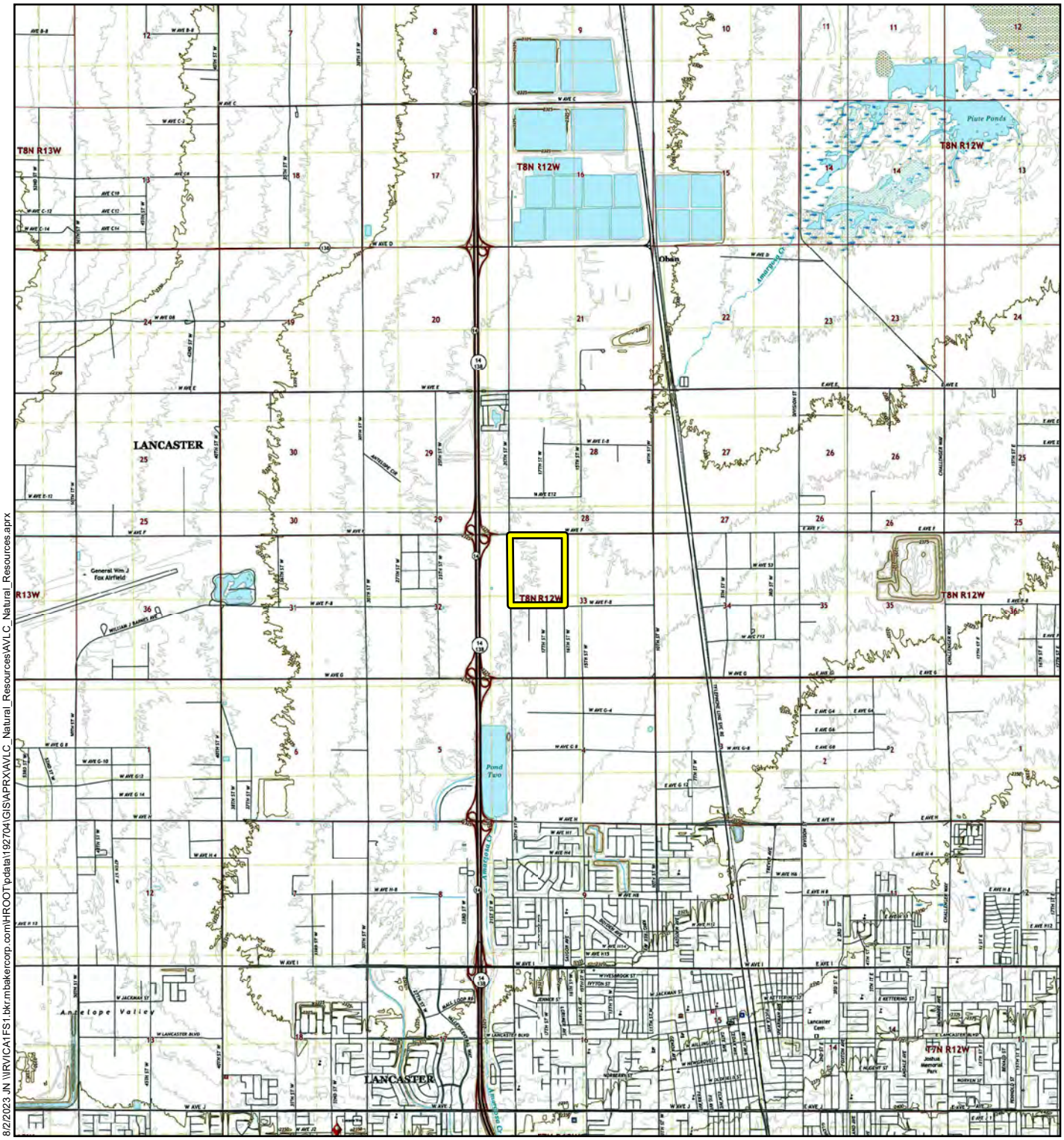
0 2.5 5 Miles

Source: ArcGIS Online, 2018

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
FOCUSED BURROWING OWL SURVEY

Regional Vicinity

Figure 1



8/2/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

Project Site (118.55 acres)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
FOCUSED BURROWING OWL SURVEY

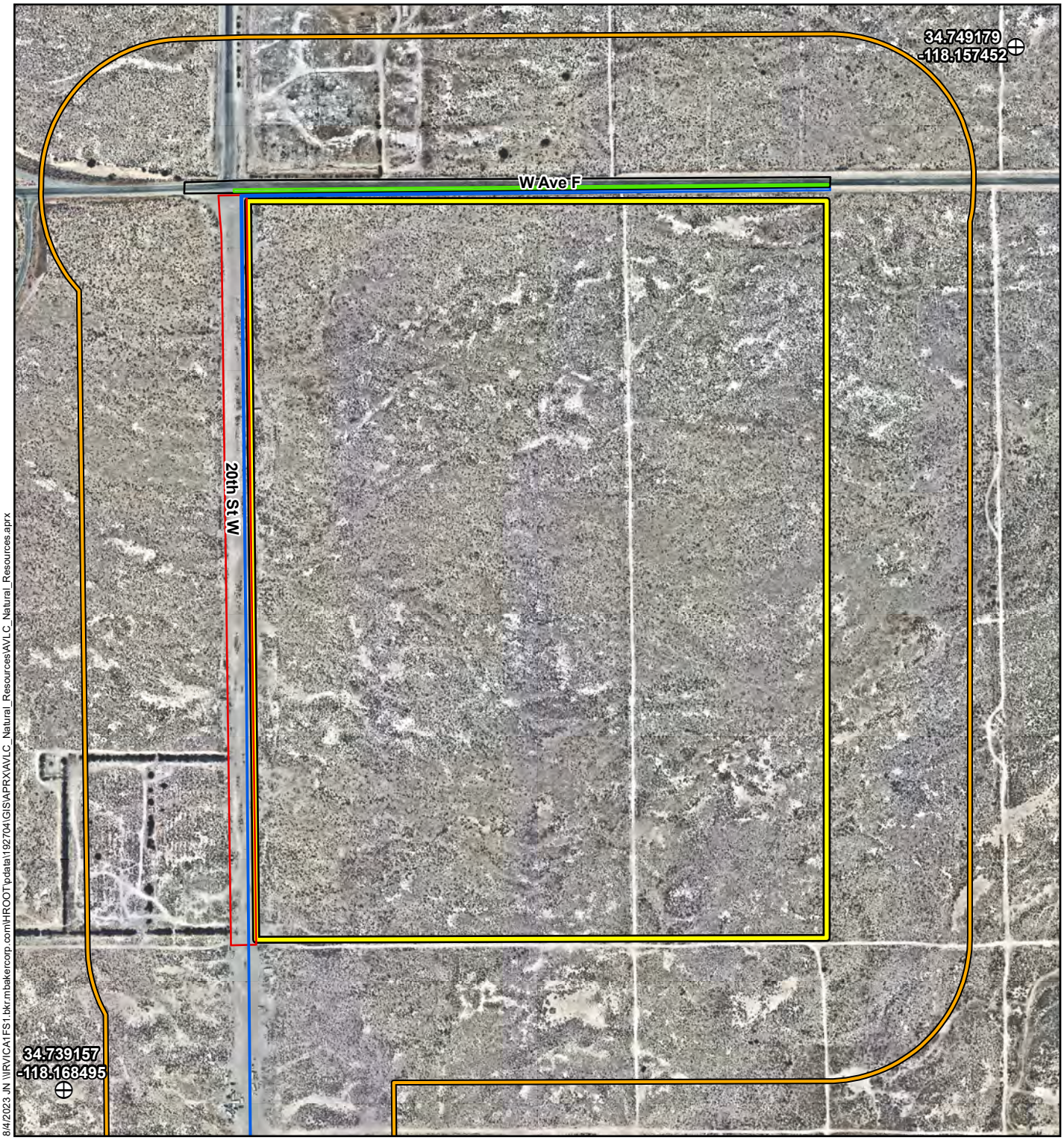
Site Vicinity

Michael Baker INTERNATIONAL

0 0.5 1 Miles

Source: USGS 7.5-Minute topographic quadrangle maps: *Lancaster East, Lancaster West, Rosamond (2022), and Rosamond Lake (2021)*

Figure 2



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Legend

- Project Site (118.55 acres)
- Survey Area (500-foot Buffer)
- Reference Point

Off-Site Improvements

- 20th Street Road Improvements
- Ave F Improvements - Turn Lanes/Possible Widening
- Sewer Extension - AVLC West
- Water - AVLC West

Michael Baker INTERNATIONAL

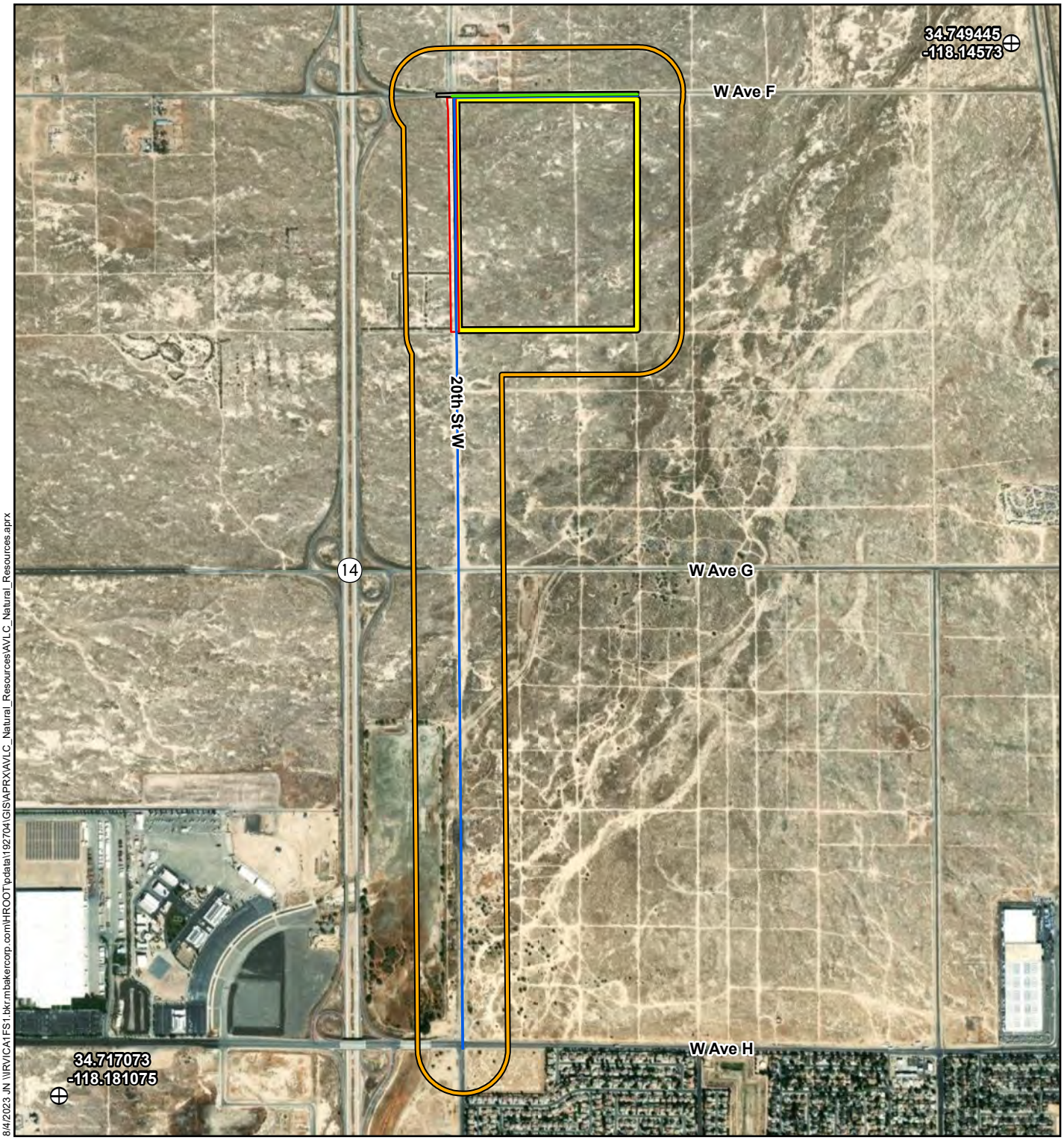
0 250 500 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
FOCUSED BURROWING OWL SURVEY

Project Site and Survey Area

Figure 3A



8/4/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

- Project Site (118.55 acres)
- Survey Area (500-foot Buffer)
- Reference Point

Off-Site Improvements

- 20th Street Road Improvements
- Ave F Improvements - Turn Lanes/Possible Widening
- Sewer Extension - AVLC West
- Water - AVLC West

Michael Baker INTERNATIONAL

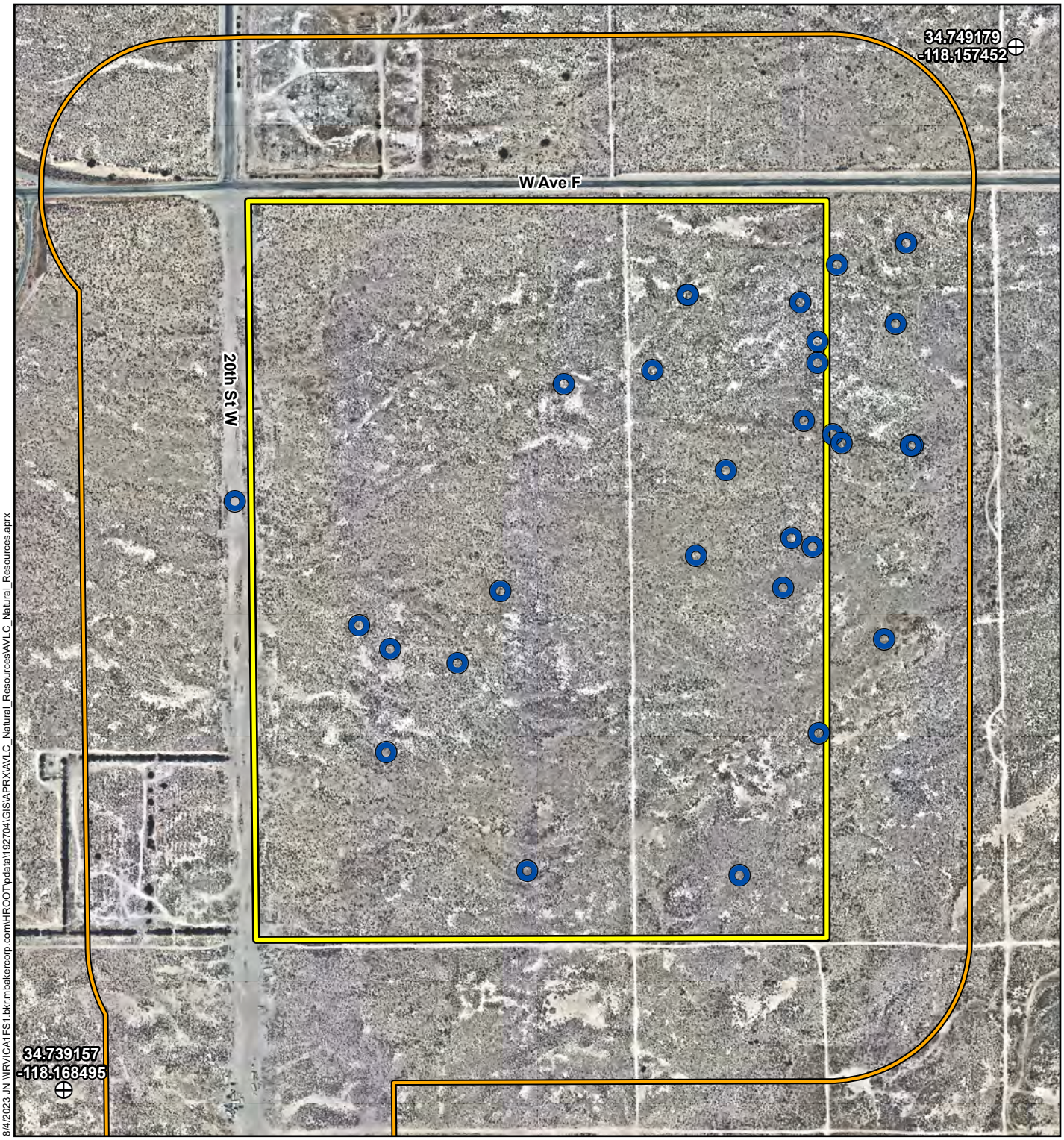
0 800 1,600 Feet

Source: Esri/Vivid/Maxar (10/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
FOCUSED BURROWING OWL SURVEY

Project Site and Survey Area

Figure 3B



8/4/2023 JN \\RVICA1FS1.bkr.mbakercorp.com\HROOT\pdata\192704\GIS\APRX\AVLC_Natural_Resources\AVLC_Natural_Resources.aprx

Legend

- Project Site (118.55 acres)
- Survey Area (500-foot Buffer)
- Reference Point
- Suitable Burrows

Michael Baker INTERNATIONAL

0 250 500 Feet

Source: Nearmap (09/2021)

ANTELOPE VALLEY LOGISTICS CENTER - WEST (AVLC - WEST) PROJECT
FOCUSED BURROWING OWL SURVEY

Survey Results

Figure 4

Attachment B

Site Photographs

Photograph 1: South-facing view from the northeast corner of the project site.

Photograph 2: South-facing view from northwest corner of project site.

Photograph 3: North-facing view from the approximate center of the site along the dirt road that bisects the project site north-south.

Photograph 4: Fossorial mammal burrow within the project site that is potentially suitable for BUOW.

Photograph 5: Fossorial mammal burrow within the project site that is potentially suitable for BUOW.

Photograph 6: Old BUOW pellet found in proximity to a potentially suitable fossorial mammal burrow. No other or recent sign observed.

Photograph 7: North-facing view of the alignment of off-site improvements along 20th Street West.

Photograph 8: Northeast-facing view of the off-site improvements survey area along Avenue F.

Attachment C

Wildlife Species Observed List

Wildlife Species Observed List

Scientific Name	**Common Name**	**Status***
Birds		
Artemisiospiza belli belli	Bell's sparrow	Watch List
Buteo jamaicensis	red-tailed hawk	
Callipepla californica	California quail	-
Cathartes aura	turkey vulture	
Corvus brachyrhynchos	American crow	-
Corvus corax	common raven	-
Eremophila alpestris	horned lark	-
Haemorhous mexicanus	house finch	
Melospiza melodia	song sparrow	-
Mimus polyglottos	northern mockingbird	
Spinus psaltria	lesser goldfinch	
Sturnella neglecta	western meadowlark	
Zenaida macroura	mourning dove	-
Zonotrichia leucophrys	white-crowned sparrow	
Mammals		
Canis latrans	coyote	-
Lepus californicus	black-tailed jackrabbit	
Otospermophilus beecheyi	California ground squirrel	
Sylvilagus audubonii	desert cottontail	-
Reptiles		
Aspidoscelis tigris tigris	great basin whiptail	-
Scleroporus occidentalis	western fence lizard	-
Uta stansburiana elegans	western side-blotched lizard	-

Attachment D

References

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