APPENDIX D

BIOLOGY RESOURCES REPORT

ROCKS
BIOLOGICAL CONSULTING





DRAFT LOCUST GATEWAY DEVELOPMENT PROJECT BIOLOGICAL TECHNICAL REPORT

City of Rialto, California

August 21, 2025

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1 INTRODUCTION

1.1 PROJECT LOCATION

The Locust Gateway Development Project (project or proposed project) consists of approximately 44.2 acres within the City of Rialto (City), San Bernardino County, California (Figure 1). The project site is in the northwestern portion of the City, approximately 0.5 mile north of State Route (SR) 210 and three miles south of Interstate (I) 15. It is bounded by West Lowell Street to the north, Bohnert Avenue to the south, North Locust Avenue to the east, and North Alder Avenue to the west. The project site lies within the Devore U.S. Geological Survey (USGS) 7.5' quadrangle (USGS 2025), within Sections 21 and 28 of Township 1 North, Range 5 West.

1.2 PROJECT DESCRIPTION

The project proposes the development of an industrial warehouse, office building, and adjacent parking lot. Off-site utility and roadway improvements would occur immediately north of the warehouse lot along West Lowell Street and east of the warehouse lot along North Locust Avenue. The primary project parcel (Assessor Parcel Number 23-919-223) is 39.9 acres, with off-site improvements planned on an additional 4.3 acres adjacent to the site, resulting in a total construction footprint of 44.2 acres.

1.3 EXISTING CONDITIONS

The project site is composed of disturbed and undisturbed Riversidean sage scrub, as well as chaparral, disturbed land, and developed land. Disturbed land is dominant in the northeastern portion of the site and is characterized by non-native grasses and anthropogenic disturbances. Riversidean sage scrub, chaparral, and developed land are dominant in the western and southern portions of the site. The topography of the project site is generally flat with minimal elevation change. Portions of the project site are partially fenced, and lands immediately surrounding the project site contain human impacts, such as scrap metal and rock piles, a detention basin, berms, and heavy machinery operations. Overhead electric utilities are located along the northwestern project boundary along North Locust Avenue. The project site is bounded by developed land, composed of commercial and industrial properties, paved roads and lots, and disturbed land.

1.4 REGULATORY FRAMEWORK

Federal, state, and local agencies have established several regulations to protect and conserve biological and aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. The regulating agencies make the final determination as to what types of permits are required.

FEDERAL REGULATIONS

Federal Endangered Species Act

The federal ESA of 1973 (16 U.S.C. § 1531 et seq.), as amended, provides for listing of endangered and threatened species of plants and animals and designation of critical habitat for

listed species. The ESA regulates the "take" of any endangered fish or wildlife species, per Section 9. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or their critical habitat, pursuant to Sections 7 and 10 of the ESA. USFWS is required to make a determination as to the extent of impact a project would have on a particular species. If it is determined that potential impacts on a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan (HCP); Section 7 provides for permitting of federal projects.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S.C. § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and listed at 50 Code of Federal Regulations (CFR) 10.13. The USFWS enforces the MBTA, which prohibits "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 CFR 328.3 (88 Federal Register [FR] 61964, September 8, 2023; Revised Definition of "Waters of the United States"; Conforming). The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits. Substantial impacts on waters of the U.S. may require an Individual Permit. Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits.

A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board, provides oversight of the Section 401 certification process in California. The RWQCBs are required to provide Water Quality Certification for licenses or permits that authorize an activity that may result in a discharge from a point source into a water of the U.S. Water Quality Certification authorization "is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements" (40 CFR 121.3).

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA (33 U.S.C. § 1342).

STATE REGULATIONS

California Environmental Quality Act

The CEQA (California Public Resources Code § 21000 et seq.) was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA). CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, where feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity, which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

California Endangered Species Act

The California Endangered Species Act of 1984 (CESA; CFGC § 2050 et seq.), in combination with the California Native Plant Protection Act of 1977 (CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists species of special concern (SSC) based on limited distribution; declining populations; diminishing habitat; or unusual scientific, recreational, or educational value. The California Department of Fish and Wildlife (CDFW) is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" (CFGC § 1602). CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3801, 4700, 5050, and 5515

CDFW protects and manages fish, wildlife, and native plant resources within California. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians),

and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

California Native Plant Protection Act (California Fish and Game Code §§ 1900–1913)

The California Native Plant Protection Act requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. The California Native Plant Protection Act prohibits the take of such plants, with certain exceptions.

California Desert Native Plants Act (California Food and Agriculture Code §§ 80001–80201)

The California Desert Native Plants Act prohibits the removal of certain species of California desert native plants on public and privately owned lands without a valid permit from the sheriff or commissioner of the county where collecting would occur. This act applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis.

The RWQCBs have primary responsibility for protecting water quality in California. As discussed above, the RWQCBs regulate discharges to surface waters under the CWA. In addition, the RWQCBs are responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if a Section 404 permit is not required for the activity. “Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

REGIONAL AND LOCAL PLANS

San Bernardino County, Countywide Policy Plan

The 2022 Countywide Policy Plan outlines countywide goals and policies as they relate to biological resources. Natural Resource (NR) goals and policies applicable to the project include:

> *Goal NR-5. Biological Resources: An interconnected landscape of open spaces and habitat areas that promotes biodiversity and healthy ecosystems, both for their intrinsic value and for the value placed on them by residents and visitors.*
>
> *Policy NR-5.1: Coordinated habitat planning. We participate in landscape-scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and*

other important biological resources and functions; and for land development and infrastructure permitting.

Policy NR-5.7: Development review, entitlement, and mitigation. We comply with state and federal regulations regarding protected species of animals and vegetation through the development review, entitlement, and environmental clearance processes.

Policy NR-5.8: Invasive species. We require the use of non-invasive plant species with new development and encourage the management of existing invasive plant species that degrade ecological function.

Per the policies outlined in the Countywide Policy Plan, the County reviews land development permits for adequacy in assessing potential impacts on NRs. The Planning Division of the County's Land Use Services has developed Biotic Resources Overlay Maps to identify sensitive biotic resources that may occur within specific areas of the County. All discretionary permit applications must disclose potential impacts on these identified resources and propose mitigation measures to eliminate or reduce significant impacts.

According to the County's Biotic Resources Overlay Map, the project site is located within the Burrowing Owl Overlay Zone (County of San Bernardino 2012); the burrowing owl (*Athene cunicularia*) is a candidate species for listing under CESA. Therefore, land development permit applications must include an analysis of potential impacts on burrowing owl and provide proposed mitigation measures, if necessary, to reduce or eliminate such impacts. Though the site does not occur in unincorporated county land, the mapping provides a useful guide for identifying potential habitat for this species. The County's owl requirements fall within the state requirements and are followed herein.

City of Rialto, General Plan

The biological resource policies outlined in the City's General Plan that relate to the project can be found in Chapter 2, Managing Our Land Supply: Land Use, Community Design, Open Space and Conservation (City of Rialto 2010).

Policies that may be applicable to the project include:

Policy 2-39.3: Continue to work with the United States Fish and Wildlife Service to adopt a habitat conservation plan to protect viability of the Delhi Sands Flower-loving Fly. Until a habitat conservation plan is established, continue to support the implementation of the existing Delhi Sands Flower-loving Fly Recovery Plan.

Due to the project site's location within the species' range, the potential for Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) to occur on site was evaluated, as discussed below.

2 METHODS

Rocks Biological Consulting (RBC) biologists conducted vegetation mapping, habitat assessments for special-status species, and an initial general biological survey on October 29, 2024. Additionally, RBC examined the site for the presence of potentially jurisdictional aquatic resources; however, a formal aquatic resources delineation to identify areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA, under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, and under the CDFW pursuant to Section 1602 of the CFGC, was not conducted. Focused non-breeding season burrowing owl surveys were conducted on October 29, 2024, November 26, 2024, January 7, 2025, January 16, 2025, and January 31, 2025. Focused rare plant surveys were conducted on May 8 and May 22, 2025, and an additional Parry's spineflower (*Chorizanthe parryi* var. *parryi*) assessment was conducted on June 18, 2025. Focused Crotch's bumble bee (*Bombus crotchii*) surveys were conducted on April 29, May 22, and June 9, 2025. Table 1 lists survey dates and conditions.

Table 1. Summary of Surveys Conducted for the Locust Gateway Development Project

Date	Activity	Surveyor(s)	Time (Start- End)	Temp. (F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Range (mph) (Start; End)
10/29/2024	Burrowing owl survey	AG, HS	0730-1100	49-64	25-50	3-5; 3-5
10/29/2024	General biological survey, vegetation mapping, constraints-level aquatic resources assessment	AG, HS	1100-1145	64-64	50-50	3-5; 3-5
11/26/2024	Burrowing owl survey	HS, KW	0700-0900	51-55	95-95	0-2; 0-2
1/7/2025	Burrowing owl survey	AG, MT	0730-0930	51-54	100-90	15-25; 10-15
1/16/2025	Burrowing owl survey	AG, KW	0715-0915	54-56	0-0	5-8; 3-5
1/31/2025	Burrowing owl survey	IB, KW	0750-0940	41-52	10-15	0-2; 0-2
4/29/2025	Crotch's bumble bee survey	IH, KW	1030-1430	65-76	0-20	0-2; 4-8
5/8/2025	Rare plant survey	JR, AG	1000-1530	69-80	0-0	1-3; 1-3
5/22/2025	Crotch's bumble bee survey	IH	1045-1430	81-87	10-5	0-3; 3-7
5/22/2025	Rare plant survey	JR, AG	1045-1430	81-87	10-5	0-3; 3-7
6/9/2025	Crotch's bumble bee survey	IH, IB	0945-1345	67-80	50-20	3-6; 1-4
6/18/2025	Parry's spineflower assessment	JR	1015-1405	87-96	0-0	1-3; 2-6
AG=Alec Goodman, HS=Hannah Swarthout, IB=Imran Badar, IH=Ian Hirschler, JR=Jim Rocks, KW=Kelsey Woldt, MT=Melissa Tamarkin						

The general biological survey, vegetation mapping, and habitat assessments were conducted within the approximately 44.2-acre project site and a surrounding 100-foot buffer (survey area) for a total of 66.7 acres. The constraints-level aquatic resources assessment was conducted within the project site plus a surrounding 50-foot buffer for a total of 55.3 acres. Burrowing owl surveys

were conducted within the project site and a surrounding 500-foot buffer, resulting in a burrowing owl survey area of 168 acres.

Note that buffer areas are included in this analysis to assess the potential for special-status species or resources in areas immediately adjacent to the project site that could be impacted by the project analyzed herein. Such information should not be considered comprehensive for all biological resources or aquatic resources that may occur in buffer areas, and buffer mapping is intended only for the project analysis outlined herein; such information is not intended for impact analysis of any potential future projects within or adjacent to project buffer areas.

2.1 DATABASE SEARCH

Prior to conducting field surveys, existing information regarding biological resources present or potentially present within the project site was obtained through a review of pertinent literature and databases, including, but not limited to:

- CDFW California Natural Diversity Database (CNDDB; CDFW 2024a)
- California Native Plant Society (CNPS) Electronic Inventory (CNPS 2024)
- USFWS Special-Status Species Database (USFWS 2024a)
- USFWS Information for Planning and Consulting (IPaC) Database (USFWS 2024b)
- USFWS National Wetlands Inventory (NWI) Database (USFWS 2024c)
- USGS National Hydrography Dataset (NHD) Database (USGS 2024a)
- Natural Resources Conservation Service (NRCS) Soils Survey Database (NRCS 2024)

Database results, along with local biological knowledge, were used for assessment of special-status species' potential for occurrence on or adjacent to the project site. The potential for occurrence tables created for the project include federally and state-listed species, candidate species, and other state-designated special-status species that have been reported within three miles of the project site (CDFW 2025a; USFWS 2024a) and determined to be potentially present in the IPaC Database (USFWS 2024b), as well as California Rare Plant Rank (CRPR) 1 and 2 species that occur within the 'Nine Quads' search for the elevational range of the project site, approximately 1,590 to 1,650 feet above mean sea level (amsl; CNPS 2024). The CNPS 'Nine Quads' search queries the USGS quadrangle in which the project site is located and the surrounding eight quadrangles, which includes Devore, Silverwood Lake, San Bernardino South, San Bernardino North, Telegraph Peak, Cajon, Guasti, Fontana, and Cucamonga Peak. The potential for special-status species to occur within the project site was refined by considering the habitat affinities of each species, field habitat assessments, vegetation mapping, and knowledge of local biological resources.

2.2 VEGETATION MAPPING AND GENERAL BIOLOGICAL SURVEYS

On October 29, 2024, RBC biologists conducted vegetation mapping in the field to provide a baseline of the biological resources that occur or have the potential to occur within the project site.

RBC conducted vegetation mapping by walking throughout the survey area and mapping vegetation communities on aerial photographs at a 1:2400 scale (1 inch = 200 feet).

The extent of each habitat type (delineated as a habitat polygon on the vegetation maps) was calculated using the Geographic Information System (GIS) application ArcGIS Collector. Habitats were classified based on the dominant and characteristic plant species in accordance with vegetation community classifications outlined in Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The vegetation communities were also compared to *The Manual of California Vegetation, 2nd Edition* (MCV2; Sawyer et al. 2009), and the equivalent classification is provided.

RBC biologists conducted general biological surveys for plants and wildlife concurrently with vegetation mapping. Photos taken during the general biological surveys are provided in Appendix A. Plant species encountered during the field survey were identified and recorded in field notebooks. Plant species that could not be identified were brought to the laboratory for identification using the dichotomous keys in the *Jepson Manual* (Baldwin et al. 2012). A list of the vascular plant species observed in the survey area is presented in Appendix B.

RBC conducted habitat assessments for special-status plants during the general biological field surveys. Special-status plant species include those that are: 1) listed or proposed for listing by federal or state agencies as threatened or endangered; 2) CRPR 1 or 2 species (CNPS 2024); or 3) considered rare, endangered, or threatened by the CDFW (CDFW 2025b) or other local conservation organizations or specialists.

In the state of California, CNPS is a statewide resource conservation organization that has developed an inventory of California's sensitive plant species. The CRPR system is recognized by the CDFW and essentially serves as an early warning list of potential candidate species for threatened or endangered status. The CRPR system is categorized as outlined in Table 2.

Table 2. CRPR Definitions

CRPR	1A	Presumed extirpated in California and rare or extinct elsewhere
	1B	Rare, threatened, or endangered in California and elsewhere
	2A	Presumed extirpated in California but more common elsewhere
	2B	Rare, threatened, or endangered in California but more common elsewhere
	3	Plants for which more information needed
	4	Plants of limited distribution
CRPR Threat Ranks	0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
	0.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

	0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Wildlife species were documented during the field survey by sight, calls, tracks, scat, or other signs, and were recorded in field notebooks. Binoculars (10X42 magnification) were used to aid in the identification of wildlife. In addition to species observed during the surveys, expected wildlife use of the project site was assessed based on known habitat preferences of local species and knowledge of their biogeographic distribution in the region. RBC conducted habitat assessments for special-status wildlife during the general biological field surveys. Special-status wildlife species include those that are: 1) listed or proposed for listing by federal or state agencies as threatened or endangered; or 2) considered endangered, threatened, or rare by the CDFW (CDFW 2025b).

A list of wildlife species observed in the project site is presented in Appendix B; scientific and common names of wildlife follow CDFW's Complete List of Amphibian, Reptile, Bird and Mammal Species in California (CDFW 2016). Twilight/nighttime surveys were not conducted, therefore crepuscular and nocturnal animals are likely under-represented in the project species list; however, habitat assessments were performed for all special-status species to ensure that any potentially present rare species are adequately addressed herein.

If observed, the location of biological resources designated as special-status by the USFWS, CDFW, and/or CNPS, were recorded in field notebooks, on aerial maps, and/or through the use of Global Positioning System (GPS) units.

2.3 SPECIAL-STATUS SPECIES SURVEYS

2.3.1 FOCUSED RARE PLANT SURVEYS

RBC botanists conducted two focused rare plant surveys in accordance with accepted botanical survey protocols developed by the USFWS and CDFW. Surveys were conducted during the appropriate blooming periods for the target species, Parry's spineflower. The surveys were conducted within the project site plus a 50-foot buffer by walking meandering transects within suitable habitat. Any special-status plants observed were mapped using a GPS, and population size, phenology, and other relevant field observations were recorded. RBC identified all plant species on site to species, subspecies, or varietal level and a compendium of all plant species identified on site was generated. Plants that could not be identified to the species, subspecies, or varietal level in the field were collected and identified in the laboratory using a microscope and dichotomous key. Additional details of survey methodology can be found in Appendix C.

2.3.2 FOCUSED BURROWING OWL SURVEYS

RBC biologists conducted focused burrowing owl surveys during the non-breeding season (September 1 – January 31), in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (BUOW Guidelines; CDFW 2012). RBC qualified biologists conducted four burrowing owl surveys during the non-breeding season; surveys were conducted between October 29, 2024, and January 31, 2025, in favorable weather conditions. All surveys were scheduled to be conducted at least three weeks apart, in accordance with CDFW BUOW Guidelines. However, wind conditions

caused the third survey on January 07, 2025, to be partially out of protocol. As a result, this survey was repeated on January 16, 2025, resulting in the final two focused surveys occurring two weeks apart.

Surveys were conducted by walking transects spaced approximately 20 meters apart throughout all suitable habitat within the survey area. At the beginning of each transect, and approximately every 100 meters, RBC biologists used binoculars (10x42) to scan the survey area for burrowing owl, active and potential burrows, and/or sign of burrowing owl. Any inaccessible areas of the 500-foot buffer were surveyed with binoculars to greatest extent possible. All observed burrows suitable for burrowing owl occupation were examined for sign, including feathers, pellets, prey remains, whitewash, and/or decoration at or near burrow entrances. Additional details of survey methodology can be found in Appendix D.

2.3.3 FOCUSED CROTCH'S BUMBLE BEE SURVEYS

Focused Crotch's bumble bee surveys were conducted by RBC biologists two to four weeks apart in April, May, and June of 2025 within the time period when detection of Crotch's bumble bee is greatest (i.e., April through August). Three surveys were performed in accordance with the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2024b). Surveys were conducted by walking transects through the project site focusing on areas where ample nectar sources were present, with a minimum of one person-hour of searching per three acres of suitable habitat. Surveyors were prepared to record the location of any observed Crotch's bumble bee, along with population size and nesting status, and to collect non-lethal photo vouchers captured at various angles to confirm accurate identification. All arthropods and potential nectar sources were identified and recorded. Full survey methods, details, and species lists can be found in Appendix E.

2.4 CONSTRAINTS–LEVEL AQUATIC RESOURCES ASSESSMENT

RBC conducted a constraints-level assessment of the review area to identify areas that may be considered potentially jurisdictional under the Corps pursuant to Section 404 of the CWA, the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act, or CDFW pursuant to CFGC §1602. Areas with depressions, drainage patterns, wetland vegetation, and/or riparian vegetation within the review area were assessed for potential jurisdictional status, with focus on the presence of defined channels, soils, and hydrology. No formal jurisdictional delineation was conducted as part of this effort.

3 RESULTS

This section includes results of the literature review, vegetation mapping, general biological surveys, constraints-level aquatic resources assessment, and focused burrowing owl surveys. Special-status biological resources are also addressed in this section and are defined as follows: 1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened/endangered population sizes; 2) species and their associated habitat types recognized by local and regional resource agencies as sensitive; 3) habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; 4) wildlife corridors and habitat linkages; and/or 5) biological resources that may or may not be considered sensitive, but are regulated under local, state, and/or federal laws.

3.1 PHYSICAL SETTING

The project site is a relatively flat parcel that supports several land cover types: developed land, disturbed land, Riversidean sage scrub, and chaparral. Disturbed land is found in the northern portion of the project site intermixed with disturbed and undisturbed Riversidean sage scrub. Riversidean sage scrub also extends south of the chamise chaparral habitat within the central portion of the site. The site buffer, off-site improvements, and southeastern project area are primarily composed of developed land with patches of undisturbed Riversidean sage scrub and disturbed land. The site is surrounded to the north, east, and northwest by commercial and industrial development with little to no native habitat. To the southeast, the project borders the Mid-Valley Landfill which supports no vegetation or native habitat due to ongoing disturbance.

On-site elevations range from approximately 1,590 to 1,650 feet amsl. Soils mapped on site include Soboba stony loamy sand, 2 to 9 percent slopes, and Soboba gravelly loamy sand, 0 to 9 percent slopes (NRCS 2024).

3.2 VEGETATION COMMUNITIES AND LAND USES

The project site supports low diversity in vegetation communities and other land covers. Table 3 provides a summary of vegetation/land cover on the site, which is depicted on Figure 2.

Table 3. Summary of Vegetation/Land Cover Within the Survey Area and Project Site

Vegetation (Holland)[1]	Vegetation[2]	Global/ State Rank	Survey Area (acres)	Project Site (onsite + offsite improvements; acres)
Developed	Developed/Disturbed	No Rank	28.0	8.4
Disturbed	Developed/Disturbed	No Rank	8.1	7.2
Riversidean Sage Scrub - Disturbed	*Eriogonum fasciculatum* Shrubland Alliance	G5/S5	14.8	12.9
Riversidean Sage Scrub	*Eriogonum fasciculatum* Shrubland Alliance	G5/S5	5.4	5.4

Chamise Chaparral	*Adenostoma fasciculatum* Shrubland Alliance	G5/S5	10.4	10.4
		Total[3]	**66.7**	**44.2**

[1] *Vegetation communities recognized by Holland (1986)*
[2] *Vegetation communities from Holland (1986) crosswalked to Sawyer et al. (2009)*
[3] *Acreages summed using raw numbers provided during GIS analysis (available upon request) and thus the sum of the total rounded numbers may not directly add up in this table*

Natural communities with ranks of S1 through S3 are considered sensitive natural communities by CDFW to be addressed in the environmental review processes of CEQA. The project site does not contain habitat that is considered a sensitive vegetation community by CDFW (CDFW 2024a).

Developed

Developed land is typically classified as lands regularly utilized by humans that are devoid of natural habitat. Developed land within the survey area primarily consists of industrial buildings, parking and loading areas, and roads. Developed land surrounds the project site, and the buffer and off-site improvement areas are primarily composed of developed land. Developed land is also found in the southeastern portion of the project site. In total, developed land occurs on 8.4 acres of the project site.

Developed habitat is not recognized by CDFW (CDFW 2024a); therefore, it is not considered a sensitive natural community under CEQA.

Disturbed

Disturbed land is typically classified as land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association (e.g., disturbed Riversidean sage scrub). Disturbed land is typically found in vacant lots, along roadsides, within construction staging areas, and in abandoned fields. Non-native annual species and perennial broadleaf species typically dominate the habitat.

Disturbed land occurs on 7.2 acres of the project site. Disturbed land on site is primarily vegetated by short-pod mustard (*Hirschfeldia incana*) and other non-native species, such as tocalote (*Centaurea melitensis*), Russian thistle (*Salsola* sp.), and slender wild oat (*Avena barbata*). There are a few scattered native species throughout the disturbed land, such as common sunflower (*Helianthus annuus*), California croton (*Croton californicus*), and mule fat (*Baccharis salicifolia*); however, they are isolated occurrences and do not function as separate vegetation communities or land cover types.

Disturbed land is not recognized by CDFW (CDFW 2024a); therefore, it is not considered a sensitive natural community under CEQA.

Riversidean Sage Scrub

Riversidean sage scrub is a coastal scrub community typically occupying xeric sites with steep slopes and well-draining soils. Vegetation cover usually stands fairly open and is dominated by coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and

brittlebush (*Encelia farinosa).* Riversidean sage scrub occurs within 5.4 acres of the project site in the northeast portion and is primarily composed of California buckwheat, coastal sagebrush, California matchweed (*Gutierrezia californica*), and black sage (*Salvia mellifera*).

Riversidean scrub is ranked as G5/S5, meaning it is "demonstrably secure because of its worldwide/statewide abundance" (CNPS 2024); therefore, it is not considered a sensitive natural community under CEQA.

Disturbed Riversidean Sage Scrub

Disturbed Riversidean sage scrub is Riversidean sage scrub that has a marked disturbance resulting in an atypical vegetation community. The disturbed Riversidean sage scrub primarily occurs in two distinct areas within the project site, one in the north and one in the south, totaling 12.9 acres. The northern area is dominated by short-pod mustard, tocalote, Spanish-clover (*Acmispon glaber*), coastal sagebrush, and tree tabacco (*Nicotiana glauca*). The southern area is denser and is dominated by California buckwheat, holly-leaf cherry (*Prunus ilicifolia*), and spiny redberry (*Rhamnus crocea*). Small patches of disturbed Riversidean sage scrub also occur within the developed areas in the southernmost portion of the site.

Riversidean sage scrub is ranked as G5/S5, meaning it is "demonstrably secure because of its worldwide/statewide abundance" (CDFW 2024a); therefore, it is not considered a sensitive natural community under CEQA.

Chamise Chaparral

Chamise chaparral is a one- to three-meters tall chapparal vegetation community overwhelmingly dominated by chamise (*Adenostoma fasciculatum*) with little to no herbaceous understory (Oberbauer et al. 2008). Associated species of this community may include ceanothus (*Ceanothus* spp.), manzanita (*Arctostaphylos* spp.), laurel sumac (*Malosma laurina*), scrub oak (*Quercus dumosa*), pipevine (*Aristolochia* spp.), and bush poppy (*Dendromecon rigida),* although they contribute little to no cover. This vegetation is adapted to repeated fires by stump sprouting and mature stands are densely interwoven with very little herbaceous understory or litter.

Chamise chaparral occurs densely in a south-central portion of the project site on 10.4 acres. The on-site chaparral habitat is dominated by chamise, holly-leaf cherry, Vasey's prickly pear (*Opuntia vaseyi*), California matchweed, and valley cholla (*Cylindropuntia bernardina*). Some disturbances were observed within this vegetation community, including disturbed bare earth, trash, and an encampment.

Chamise chaparral is ranked as G5/S5, meaning it is "demonstrably secure because of its worldwide/statewide abundance" (CNPS 2024); therefore, it is not considered a sensitive natural community under CEQA.

3.3 PLANTS AND WILDLIFE

The project site supports a relatively moderate diversity of wildlife and plant species. A total of 96 plant species (59 percent native, 41 percent non-native) were observed during the general

biological survey and focused species surveys (Appendix B). A total of 35 bird species, four reptile species, three mammal species, and 33 invertebrate species were observed (Appendix B).

3.3.1 SPECIAL-STATUS PLANT SPECIES

One special-status plant species, Parry's spineflower, was observed on site. No additional special-status plant species were observed or have a high probability for occurrence based on the lack of suitable habitat on site. Please note that CRPR 3 and 4 species were omitted from the potential to occur analysis below due to their relatively low threat status, consistent with standard practice.

Although special-status plant species were not observed during the general biological field survey, Parry's spineflower was assessed to have a moderate potential to occur within the project site based on the presence of suitable habitat (Table 4). Focused rare plant surveys were conducted during appropriate blooming period for this target species, and surveys were positive for Parry's spineflower. Please note that special-status plant species with low potential to occur or not expected to occur are not addressed further in this report; because these species have low or no potential for occurrence, no impacts are anticipated on these species. A full list of special-status plant species assessed and their potential to occur on site is presented in Table 4.

Table 4. Assessment of Special-Status Plant Species Potential to Occur Within the Project Site

Species	Status	Habitat Description	Potential to Occur
Aparejo grass (*Muhlenbergia utilis*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms October-May. Chaparral, cismontane woodland, coastal scrub, marshes and swamps, and meadows and seeps. Elevation 80-7,630 feet.	None. Species occurs in wetland habitats, such as ponds and streams, which are not naturally occurring on site.
Black bog-rush (*Schoenus nigricans*)	CRPR 2B.2	Perennial glasslike herb. Blooms August-September. Marshes and swamps. Elevation 490-6,650 feet.	None. Suitable wetland-riparian habitat is not present on site.
Bristly sedge (*Carex comosa*)	CRPR 2B.1	Perennial rhizomatous herb. Blooms May-September. Coastal prairie, marshes and swamps (lake margins), valley and foothill grasslands. Elevation 0-2,050 feet.	None. Suitable wetland habitat is not present on site.
California satintail (*Imperata brevifolia*)	CRPR 2B.1	Perennial rhizomatous herb. Blooms September-May. Chaparral, coastal scrub, meadows and seeps, Mojavean desert scrub, and riparian scrub. Elevation 0-3,985 feet.	Low. Sage scrub and chaparral habitats are present on site, however, suitable aquatic habitat such as wet springs, meadows, streambanks, and floodplains are not present, and species has not been documented within the project vicinity since 1907 (Calflora 2025).

Species	Status	Habitat Description	Potential to Occur
California saw-grass (*Cladium californicum*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms June-September. Marshes and swamps, and meadows and seeps. Elevation 195-5,250 feet.	**None.** Species occurs in alkaline marshes and swamps which are not present on site.
Chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Blooms January-April. Chaparral, cismontane woodland, and coastal scrub. Elevation 50-2,625 feet.	**Low.** Native scrub habitat on site is isolated and disturbed, and woodland habitat is not present in the project site or surrounding landscape. Chaparral is present on site; however, no recent occurrences of this species are documented within project vicinity (Calflora 2025).
Gambel's water cress (*Nasturtium gambelii*)	FE; ST; CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Marshes and swamps (brackish, freshwater). Elevation 15-1,085 feet.	**None.** Species occurs in marshes, streambeds, and lake margins which are not present on site.
Greata's aster (*Symphyotrichum greatae*)	CNPR 1B.3	Perennial rhizomatous herb. Blooms June-October. Chaparral, cismontane woodland, and coastal scrub. Elevation 985-6,895 feet.	**None.** Species occurs predominately in damp canyons which are not present in the native scrub habitat on site.
Horn's milk-vetch (*Astragalus hornii* var. *hornii*)	CRPR 1B.1	Annual herb. Blooms May-October. Lake margins, alkaline, meadows and seeps, playas. Elevation 195-2,790 feet.	**None.** Species occurs on salty flats and lake shores which are not present on site.
Hot springs fimbristylis (*Fimbristylis thermalis*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms July-September. Meadows and seeps. Elevation 360-4,395 feet.	**None.** Species occurs in wet mineralized soils near hot springs and seepage meadows which are not present on site.
Intermediate mariposa lily (*Calochortus weedii* var. *intermedius*)	CRPR 1B.2	Perennial bulbiferous herb. Blooms May-July. Chaparral, coastal scrub, valley and foothill grassland. Elevation 345-2,805 feet.	**None.** Chaparral habitat is present on site; however, this species prefers dry, rocky, open slopes, which are not present on site. Not known from project vicinity (Calflora 2025).
Latimer's woodland-gilia (*Saltugilia latimeri*)	CNPR 1B.2	Annual herb. Blooms March-June. Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Elevation 1,310-6,235 feet.	**None.** Chaparral present on site; however, species prefers dry desert slopes which are not present on site. Not known from project vicinity (Calflora 2025).

Species	Status	Habitat Description	Potential to Occur
Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*)	CRPR 1A	Perennial rhizomatous herb. Blooms August-October. Marshes and swamps (coastal salt and freshwater). Elevation 30-5,005 feet.	None. Species occurs in freshwater-marsh and salt-marsh which are not present on site. Species is presumed extinct (Calflora 2025).
Mesa horkelia (*Horkelia cuneata* var. *puberula*)	CRPR 1B.1	Perennial herb. Blooms February-September. Maritime chaparral, cismontane woodland, and coastal scrub. Elevation 230-2,657 feet.	Low. Chaparral habitat and dry loamy sands present on site. Species prefers foothill habitat, which is not found on site. No contemporary occurrences recorded in project vicinity (Calflora 2025).
Nevin's barberry (*Berberis nevinii*)	FE; SE; CNPR 1B.1	Perennial evergreen shrub. Blooms (February) March-June. Chaparral, cismontane woodland, coastal scrub, and Riparian scrub. Elevation 230-2,705 feet.	Low. Occurs in riparian habitat and/or washes that are not present on site; however, chaparral is found on site. Species is a conspicuous perennial that would have been observed if present.
Parish's desert-thorn *(Lycium parishii)*	CRPR 2B.3	Perennial shrub. Blooms March-April. Coastal scrub and Sonoran desert scrub. Elevation 445-3,280 feet.	None. Prefers rocky slopes and canyons which are not present on site. Species is a conspicuous perennial that would have been observed if present.
Parry's spineflower (*Chorizanthe parryi* var. *parryi*)	CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation 900-4,000 feet.	Present. Suitable chaparral habitat with sandy soil present on site. Species observed in 2012 less than one half mile south of project site in loamy sand conditions similar to those found on site (Calflora 2025). Observed during 2025 focused rare plant surveys.
Prairie wedge grass (*Sphenopholis obtusata*)	CRPR 2B.2	Perennial herb. Blooms April-July. Cismontane woodland, meadows and seeps. Elevation 984-6,561 feet.	None. Species prefers woodlands, wet meadows, streambanks, and ponds which are not present on the site.
Prostrate vernal pool navarretia (*Navarretia prostrata*)	CRPR 1B.2	Annual herb. Blooms April-July. Coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elevation 10-3,970 feet.	None. Species occurs in alkaline floodplains, vernal pools, and wetland habitats which are not present on site.
Salt spring checkerbloom (*Sidalcea neomexicana*)	CRPR 2B.2	Perennial herb. Blooms March-June. Chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, and playas. Elevation 50-5,020 feet.	None. Species occurs in alkaline springs, marshes, and playas which are not present on site.

Species	Status	Habitat Description	Potential to Occur
San Bernardino aster (*Symphyotrichum defoliatum*)	CRPR 1B.2	Perennial rhizomatous herb. Blooms July-November. Cismontane woodlands, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley/foothill grasslands. Elevation 7-6,690 feet.	Very Low. Disturbed land found on site; however, species typically prefers wetlands. Gravely loamy sands present on site are not suitable for species. No recent observations of this species in the project vicinity (Calflora 2025).
Sanford's arrowhead (*Sagittaria sanfordii*)	CRPR 1B.2	Perennial rhizomatous herb. Blooms May-October (November). Marshes and swamps. Elevation 0-2,135 feet.	None. Species prefers ponds and ditches in freshwater-marshes which are not present on site.
Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)	FE; SE; CRPR 1B.1	Perennial herb. Blooms April-September. Chaparral and coastal alluvial fan scrub. Elevation 298-2,000 feet.	None. Species is exclusively found within flood plains which are not present on site.
Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*)	CRPR 1B.2	Perennial stem. Blooms April-June (August). Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Elevation 1,395-5,905.	None. Chaparral habitat and sandy soil is present on site; however, regional occurrences of this species are found only in higher elevations (Calflora 2025).
Singlewhorl burrowbush (*Ambrosia monogyra*)	CRPR 2B.2	Perennial shrub. Blooms August-November. Chaparral, Sonoran desert scrub. Elevation 35-1,640 feet.	None. Occurs in washes and riverbeds which are not present on site.
Slender-horned spineflower (*Dodecahema leptoceras*)	FE; SE; CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, cismontane woodland, alluvial fan coastal scrub. Elevation 655-2,490 feet.	Low. Chaparral with sand and gravel substrate habitat is present on site; however, local occurrences are restricted to alluvial benches in Lytle Creek Wash and Cajon Wash, which are the preferred habitat for this species (Calflora 2025). Not observed during 2025 focused rare plant surveys.
Smooth tarplant (*Centromadia pungens* ssp. *laevis*)	CRPR 1B.1	Annual herb. Blooms April-September. Chenopod scrub, meadows and seeps, playa, riparian woodland, valley and foothill grassland. Elevation 0-2,100 feet.	Low. Species prefers open, poorly drained flats and waterway banks/beds. Contemporary observations of this species from the project vicinity are restricted to the floodplain, which does not overlap with the project site (Calflora 2025). Not observed during 2025 focused rare plant surveys.

Species	Status	Habitat Description	Potential to Occur
Southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*)	CRPR 1B.2	Perennial rhizomatous herb. Blooms June-August. Chaparral, cismontane woodland, lower montane coniferous forest. Elevation 1,395-6,560 feet.	Very Low. Chaparral habitat is present on site; however, regional occurrences of this species are restricted to higher elevations and are associated with aquatic features which are not present on site (Calflora 2025).
Thread-leaved brodiaea (*Brodiaea filifolia*)	FT; SE; CRPR 1B.1	Perennial bulbiferous herb. Blooms March-June. Chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Elevation 80-3,675 feet.	None. Chaparral and disturbed sage scrub habitat are present on site; however, no occurrences of this species have been documented within the project vicinity (Calflora 2025). Not observed during 2025 focused rare plant surveys.
White rabbit-tobacco (*Pseudognaphalium leucocephalum)*	CRPR 2B.2	Perennial herb. Blooms (July) August-November (December). Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation 0-6,890 feet.	Low. Chaparral and disturbed sage scrub habitats are present on site. However, this species is most commonly associated with washes, streams, and canyon bottoms, which are not found on site, and this species is not known from project vicinity (Calflora 2025).
White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*)	CRPR 1B.2	Annual herb. Blooms April-June. Coastal scrub, Mojavean desert scrub, pinyon and juniper woodland. Elevation 985-3,935 feet.	Low. Although sage scrub habitat with sandy to gravelly soils are present on site, this species prefers alluvial fans which are not present on site. Species was documented in 2012 less than two miles northeast of project site at lower Lytle Creek in sand-gravel substrate (Calflora 2025). Not observed during 2025 focused rare plant surveys.

FE: Federally Endangered
FT: Federally Threatened
SE: State Endangered
ST: State Threatened
CRPR: California Rare Plant Rank

3.3.1.1 Threatened and Endangered Plant Species

No federally or state-listed as threatened or endangered plant species were observed during field surveys and none have a moderate or high potential to occur based on the lack of suitable habitats, proximity to frequent human disturbance in the immediate surrounding areas, and the isolated nature of the on-site native habitats from other areas of native vegetation (Table 4).

3.3.1.2 Other Special-Status Plant Species

Parry's spineflower (Chorizanthe parryi var. parryi)

Parry's spineflower is a cryptic annual herb in the buckwheat family (Polygonaceae) with short, hooked involucre awns and small white petals. Parry's spineflower is native and endemic to Southern California and blooms from April to June. Occurrences range from San Diego to Ventura County in elevations from 900 to 4,000 feet amsl. This species prefers sandy and rocky soils in dry chaparral, coastal scrub, cistomane woodland, and valley grassland (CNPS 2024). Parry's spineflower is a CRPR rank 1B.1 species, meaning it is rare, threatened, or endangered in California and elsewhere and eligible for state-listing under CEQA. Parry's spineflower is also a State Rank S2, meaning it is "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" (CNPS 2024).

Parry's spineflower was not detected on the project site during the general biological survey; however, this species was observed during focused rare plant surveys conducted within the species' typical blooming period (April – June) in 2025. Parry's spineflower was found within the chaparral vegetation community near the center of the project site. Occurrences were primarily associated with open shallow basins consisting of lower growing perennial species, such as California matchweed, with larger chaparral species, such as chamise and holly-leaved cherry (*Prunus Illicifolia*), on the margins. Parry's spineflower was more abundant and clustered on loamy-sand soils with cryptobiotic crust and less abundant or not present on coarse gravelly loam or where the soil was disturbed.

Approximately 1,200 individuals of Parry's spineflower were documented on site (Figure 2). Please refer to Appendix C for the full survey results.

3.3.2 SPECIAL-STATUS WILDLIFE SPECIES AND CRITICAL HABITATS

Five special-status wildlife species, Crotch's bumble bee (state candidate for listing under the CESA), Cooper's hawk (*Accipiter cooperii*; CDFW Watch List [WL]), coastal whiptail (*Aspidoscelis tigris stejnegeri*; CDFW Species of Special Concern [SSC]), Costa's hummingbird (*Calypte costae*; USFWS Bird of Conservation Concern [BCC]), and Lawrence's goldfinch (*Spinus lawrencei*; USFWS BCC), were observed during project field surveys, and seven additional species have a low-to-moderate or moderate potential to occur within the project site based on the presence of suitable habitat (Table 5). Please note that special-status wildlife species with low potential to occur or not expected to occur are not addressed further in this report; because these species have low or no potential for occurrence, no impacts are anticipated on these species. A full list of special-status wildlife assessed and their potential to occur on site is presented in Table 5, below.

Table 5. Assessment of Special-Status Wildlife Species Potential to Occur Within the Project Site

Species	Status	Habitat Description	Potential to Occur
INVERTEBRATES			
Crotch's bumble bee (*Bombus crotchii*)	CSE	Arid shrublands and grasslands in coastal and foothill areas of southern California. Nectar plants include milkweeds, buckwheat, and lupines.	**Present.** Crotch's bumble bee was observed on site during 2025 focused surveys. This species can persist in semi-natural habitats surrounded by intensely modified landscapes, such as the sparse disturbed scrub habitat within the project site (NatureServe 2024). Suitable potential nectar sources and small mammal burrows are present on site. Species has also been reported approximately 1.3 miles northwest of the site in 2024 (CDFW 2025c).
Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*)	FE	Found in sandy areas composed of Delhi fine sands, stabilized by sparse native vegetation.	**Low.** Delhi fine sands are present in the region; however, on-site soils are Soboba gravelly and stony loamy sands, which are not suitable for this species.
Monarch butterfly, California overwintering population (*Danaus plexippus plexippus pop. 1*)	FPT	Found in a variety of habitats across the United States and Mexico (e.g., grasslands, urban land, mountains, and coastal habitats). Exclusively oviposit on milkweed. Nectivorous adults require flowering plants. Roost in eucalyptus, Monterey pines, and Monterey cypresses in California.	**Low, no potential for overwintering.** Many potential nectar sources observed; however, overwintering habitat does not occur on site.
REPTILES			
California glossy snake (*Arizona elegans occidentalis*)	SSC	Found in arid scrub, rocky washes, grasslands, and chaparral habitats. Prefers habitats containing open areas and loose soils for burrowing.	**Low.** Chaparral and sage scrub habitat on site are marginally suitable for this species; however, local occurrences are restricted to rocky washes which are not present on site (CDFW 2025c). Loose soils suitable for burrowing occur on site in dense shrubby habitat.

Species	Status	Habitat Description	Potential to Occur
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	A variety of rocky, sandy, dry habitats including sage scrub, chaparral, woodlands on friable loose soil.	**Present.** Chaparral and sage scrub habitat on site are suitable for this species. Suitable loose soils are present on site in dense shrubby habitat.
Coast horned lizard (*Phrynosoma blainvillii*)	SSC	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub. Requires open areas, bushes, and fine loose soil.	**Low-to-Moderate.** Suitable chaparral and sage scrub habitats with sandy and friable soils are present on site in dense shrubby habitat.
Orange-throated whiptail (*Aspidoscelis hyperythra*)	WL	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub.	**Very low.** Chaparral and sage scrub habitat on-site are marginally suitable for this species; however, this species typically occupies washes, stream sides, rocky hillsides which are not present on site.
Southern California legless lizard (*Anniella stebbinsi*)	SSC	Found in a variety of habitats including coastal dunes, chaparral, coastal scrub, sandy washes, and alluvial fans, containing moist, loose soils.	**Moderate.** Suitable chaparral and disturbed sage scrub habitats with leaf litter under shrubs and loose sandy soils present on site. Species has been documented approximately two miles northwest of project site in 2018 (CDFW 2025c), and there have been two observations reported within 1.5 miles of the site since 2023 (iNaturalist 2025). Species was searched for during 2025 focused surveys and not found.
Southwestern pond turtle (*Actinemys pallida*)	FPT; SSC	Found in ponds, lakes, streams, creeks, marshes, and irrigation ditches, with abundant vegetation. Requires logs, rocks, cattail mats, and exposed banks for basking.	**None.** Aquatic habitat conditions required for species are not present on site.

Species	Status	Habitat Description	Potential to Occur
Southern rubber boa (*Charina umbratical*)	SE	Found in oak-conifer and mixed-conifer forests at elevations between roughly 5,000 to 8,200 feet where rocks and logs or other debris provide shelter.	**Very Low.** Suitable habitat not present; project site is outside elevation range.
AMPHIBIANS			
Arroyo toad (*Anaxyrus californicus*)	FE; SSC	Habitat generally consists of narrow and shallow aquatic and riparian areas with slow moving water. Require breeding pools with the following parameters: 2-4 feet wide, less than 4 inches deep, lacking currents.	**None.** Species requires access to slow moving water. Aquatic habitat conditions required for species are not present on site.
Western spadefoot (*Spea hammondii*)	FPT; SSC	Found in temporary ponds, vernal pools, and backwaters of flowing creeks, as well as adjacent upland habitats such as grasslands and coastal sage scrub for burrowing. May use kangaroo rat (*Dipodomys* spp.) or other burrows for cover during hot, dry season.	**Low.** Aquatic resources required by this species do not occur on site. Though potentially suitable upland habitat is present, it is isolated from suitable aquatic resources.
FISH			
Santa Ana sucker (*Catostomus santaanae*)	FT; SSC	Found in a variety of freshwater habitats including streams, rivers, and creeks. Prefers areas with rocky or gravelly bottoms and clear, well oxygenated water with moderate current.	**None.** Aquatic habitat conditions required for this species are not present on site.

Species	Status	Habitat Description	Potential to Occur
BIRDS			
Belding's savannah sparrow (*Passerculus sandwichensis beldingii*)	SE	Found primarily in the upper marsh zone that is flooded infrequently by the tide. Nest on or near the ground within habitats dominated by dense pickleweed, shore grass, and saltwort.	None. Species occurs in coastal salt marsh habitat which is not present on site.
Bell's sparrow (*Artemisiospiza belli belli*)	WL	Found in sagebrush, alkali desert scrub, and desert scrub in low, dense stands of shrubs. Frequently associated with *Atriplex* spp. in desert habitats.	Low. Dense and low areas of sage scrub habitat on site is marginally suitable for this species; however, preferred habitat is not present.
Burrowing owl (*Athene cunicularia*)	CSE; SSC	Found in grasslands and open scrub from coast to foothills. Strongly associated with California ground squirrel and other fossorial mammal burrows.	Moderate (Surveys Negative). Suitable open scrub habitat is present on site. A relatively small number of California ground squirrel burrow complexes occur on site. This species is known to occur locally and has been recorded less than two miles southeast of the project site (CDFW 2025c). Focused non-breeding surveys were negative; however, future occupation possible based on suitable habitat.
California gull (*Larus californicus*)	WL	Preferred coastal habitats include sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands. In inland settings, his species frequents lacustrine, riverine, and cropland habitats in addition to landfill dumps, and open lawns in cities.	Low. This species is known to occur inland and utilize landfill dumps as foraging habitat. The Mid-Valley Landfill, located immediately southwest of the project site, provides suitable habitat. However, suitable habitat for nesting and foraging is not present on the project site.

Species	Status	Habitat Description	Potential to Occur
California horned lark (*Eremophila alpestris actia*)	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	**Moderate.** Suitable habitat is present. Species is known to be tolerant of development and can inhabit a variety of habitats. RBC biologists have observed this species in the project vicinity in habitats with similar conditions.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT; SSC	Found in sage scrub habitats, often on slopes. Nests in shrubs including sagebrush, buckwheat, and sage. Diegan coastal sage scrub and other similar open scrub habitats in coastal areas, with most populations occurring below 1,500 feet in elevation.	**Low.** Sage scrub habitat present on site is fragmented and disturbed. Species was observed in a now developed area adjacent to the site in 1997 (CDFW 2025c), but the species is likely extirpated from the immediate area. The most recent, nearby observation of this species was approximately three miles east of the project site near Lytle Creek Wash (CDFW 2025c). Would have likely been detected during surveys if present (e.g., focused burrowing owl, rare plant, and Crotch's bumble bee surveys).
Cooper's hawk (*Accipiter cooperii*)	WL	Found in oak woodlands and occasionally in willow or eucalyptus woodlands.	**Present.** Species was observed flying above site before it perched atop a building adjacent to the northern project boundary. Individual was not observed directly using project site.
Costa's hummingbird (*Calypte costae*)	BCC	Breeds in desert scrub. Occurs in Sonoran and Mojave Desert scrub, coastal California chaparral, California sage scrub, deciduous forest, and desert scrub.	**Present.** Observed on the project site on May 8, 2025. Suitable foraging and nesting habitat are present.
Ferruginous hawk (*Buteo regalis*)	WL	Found in open grasslands, agricultural areas, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats.	**Low.** Open areas within disturbed and sage scrub habitat on site are marginally suitable for species foraging. Migrates through the region but is not a resident species (eBird 2025).

Species	Status	Habitat Description	Potential to Occur
Golden eagle (*Aquila chrysaetos*)	FP; WL	Found in open and semi open country featuring native vegetation across most of the northern hemisphere. Nest on cliffs and steep escarpments in grassland, chapparal, shrubland, forest, and other vegetated areas.	**Low.** Suitable nesting and overwintering habitat are not present on site. Disturbed land in northern portion of site may provide marginally suitable habitat for foraging and prey species (California ground squirrel and desert cotton tail) were recorded on site; however, the site is not contiguous with large areas of undeveloped land.
Least Bell's vireo (*Vireo bellii pusillus*)	FE; SE	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets.	**Very Low.** Suitable riparian habitat does not occur within the project site.
Lawrence's goldfinch (*Spinus lawrencei*)	BCC	Found in chaparral, coastal scrub, pinyon pine-juniper woodlands, oak woodlands, riparian, and disturbed habitats. Also found in semi-urban, weedy, and agricultural environments. Generally associated with a water source, especially in drier regions.	**Present.** Observed on the project site on May 8, 2025. Site is highly suitable for foraging but only marginally suitable for nesting.
Loggerhead shrike (*Lanius ludovicianus*)	SSC	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting. Species requires vegetation with spines or thorns (Yosef 1996), or artificial objects such as barbed wire to impale its prey species.	**Moderate.** Suitable chaparral and dense vegetation found on site. Project site contains barbed wire and sharp fencing appropriate for species feeding techniques. RBC biologists have observed this species in the project vicinity in habitat with similar conditions.

Species	Status	Habitat Description	Potential to Occur
Merlin (*Falco columbarius*)	WL	Found in edges of grasslands and deserts. In open country, clumps of trees or windbreaks are required for roosting.	Low-to-Moderate. Semi-open disturbed habitats marginally suitable for foraging are present on site. Species does not nest in southern California. RBC biologists have observed this species in the project vicinity in habitats with similar conditions.
Prairie falcon (*Falco mexicanus*)	WL	Found in desert shrubland and grasslands. Primarily forage in grassland habitats.	Low-to-Moderate. Species tends to forage in areas with lower and sparser vegetation than found on site. Suitable breeding habitat is not present. Species was observed by RBC biologists in similar conditions approximately two miles southeast of project site.
Northern harrier (*Circus cyaneus*)	SSC	Found in meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands. Nest on the ground, often near an aquatic resource or within the waterbody itself using sticks or sedge tussocks as a foundation. May also nest in grasslands, grain fields, or sagebrush flats several miles from water.	Low. Disturbed land in northern portion of site may provide marginally suitable habitat suitable for foraging and prey species (California ground squirrel and desert cotton tail) were recorded on site; however, the site is not contiguous with large areas of undeveloped land.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	WL	Found in mostly in sage scrub and chaparral, but also grassland habitats with scattered scrubs. Prefers open habitat with rocky slopes. May also be found in open sage scrub/grassy areas of successional growth for example, after a fire.	Low. Sage scrub and chaparral habitat on site are marginally suitable for this species; however, preferred rocky slopes are not present and this species is not generally tolerant of human disturbance.
Southwestern willow flycatcher (*Empidonax traillii*)	FE; SE	Found in in thick riparian areas with willows near standing or running water.	Very Low. Suitable riparian habitat does not occur within the project site.

Species	Status	Habitat Description	Potential to Occur
MAMMALS			
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)	SSC	Found in low elevation grassland, alluvial sage scrub, and coastal sage scrub.	**Low.** Sage scrub habitat on site is marginally suitable for this species; however, disturbance and surrounding development make it unlikely for this species to occur. This species was previously recorded adjacent to the project site in 2003; however, that land has since been developed. Species was also observed near the project site in 2015 prior to the development of Sierra Lakes Commerce Center. Very few small mammal burrows were observed on site and friable sandy soils are limited to dense shrubby areas.
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	SSC	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	**Low.** Disturbed scrub and chaparral on site are marginally suitable for this species; however, disturbance and surrounding development make it unlikely for this species to occur. Species observations were recorded adjacent to the project site in 2003 prior to development of Target Distribution Center (CDFW 2025c). Very few small mammal burrows were observed on site.

Species	Status	Habitat Description	Potential to Occur
San Bernardino kangaroo rat (*Dipodomys merriami parvus*)	FE; SE; SSC	Found along floodplains, washes and alluvial fans in scrub and chaparral habitats. Soft soil required to burrow.	Low. Riversidean alluvial fan, floodplains, and washes are not present on site. Sandy soils for burrowing do not occur within open areas on the project site; openings are compacted and non-friable. Friable soils are present on site but occur in areas of dense vegetation not suitable for San Bernardino kangaroo rat. Very few small mammal burrows were observed on site. The site is isolated from other areas of suitable habitat. Final critical habitat for this species is located less than 700 feet west of the site but has since been developed for Target Distribution Center and habitat for San Bernardino kangaroo rat no longer occurs in this location (CDFW 2025c). The nearest extant population is greater than 0.5 mile to the north within Lytle Creek Wash; however, San Bernardino kangaroo rats only disperse up to 0.3 mile (USFWS 2009) and no suitable habitat is present between this population and the project site.
Western yellow bat (*Lasiurus xanthinus*)	SSC	Occupies a range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes even residential areas.	Low. Species prefers roosting in trees over three meters (10 feet) tall, which are not present on site but occur as ornamental pines in the southern buffer zone. However, sage scrub and chaparral habitat within the project site is unlikely to be used by this species.

BCC: USFWS Birds of Conservation Concern
CSE: Candidate Species under CESA
FE: Federally Endangered
FT: Federally Threatened
FPT: Federally Proposed Threatened
FP: CDFW Fully Protected
SE: State Endangered
SSC: CDFW Species of Special Concern
WL: CDFW Watch List Species

3.3.2.1 Threatened and Endangered Wildlife Species

Burrowing Owl (Athene cunicularia)

On October 10, 2024, the California Fish and Game Commission unanimously approved the listing of burrowing owl as a candidate species for listing under CESA. The species will undergo a one-year review prior to issuance of a final decision on listing. As a candidate for potential listing, the

species is temporarily awarded the same protections as a state-listed endangered or threatened species (CFGC 2024).

Suitable burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable burrowing owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat; both natural and artificial burrows provide protection, shelter, and nests for burrowing owl (Henny and Blus 1981). Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but may also use human-made structures, such as concrete culverts, debris piles, or openings beneath concrete or asphalt pavement.

Burrowing owls have declined throughout much of their range because of habitat loss due to urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978). The incidental poisoning of burrowing owls and the destruction of their burrows during eradication programs aimed at rodent colonies have also caused their decline (Collins 1979; Remsen 1978). Although burrowing owls are relatively tolerant of lower levels of human activity, human-related impacts, such as shooting and introduction of non-native predators, have negative population impacts. Burrowing owls often nest and perch near roads where they are vulnerable to roadside shooting, fatal car strikes, and general harassment (Remsen 1978).

The project is within the Burrowing Owl Overlay Zone per the San Bernardino County Museum Biological Species Database and General Plan (County of San Bernardino 2012). No burrowing owl individuals, active sign, or evidence of burrowing owls were observed during the general biological survey on October 29, 2024, nor during focused burrowing owl surveys between October 29, 2024, and January 31, 2025. Ten California ground squirrel burrows suitable for burrowing owl were documented on site; however, no burrowing owl sign was observed. Suitable habitat and mapped burrows were inspected during focused surveys for Crotch's bumble bee and rare plants in spring and early summer of 2025 and continued burrowing owl absence was recorded. Despite negative survey results, burrowing owl could forage, seek refuge, and/or breed on site in the future due to the presence of suitable habitat and burrows throughout the project site. Full survey results are provided in Appendix D.

Crotch's Bumble Bee (Bombus crotchii)

The Crotch's bumble bee is currently a candidate for listing under the CESA based on a 2018 petition submitted by the Xerces Society for Invertebrate Conservation, Defenders of Wildlife and Center for Food Safety (CDFW 2022). This species has historically ranged from central California to Baja California Del Norte though recent records indicate a reduction at longitudinal extremes, with most detections occurring in southern California (Thorp et al., 1983, NatureServe Explorer 2023, Williams et al. 2014). Largely absent from mountainous regions, Crotch's bumble bee is distributed from the coast, east to the desert edge (Thorp et al., 1983, Williams et al. 2014).

Suitable habitat for this species includes a variety of open shrub and grassland vegetation communities containing ample flowers for nectaring. Due to their short tongue, Crotch's bumble bee tend to nectar on Medicago, Lupinus, Chaenactis, Asclepias, Phacelia, and Salvia, amongst a

variety of other genera (Williams et al. 2014). Though Crotch's bumble bee is tolerant of fragmented and/or semi-urban environments, habitat loss, climate change, and pesticide use are considered imminent threats to populations (Williams et al. 2014; CDFW 2022).

Crotch's bumble bee has been recorded approximately 1.3 miles northwest of the project site near Duncan Canyon Road (CDFW 2025c), which is within the dispersal and foraging flight distance for the species (CDFW 2023). The site supports sage scrub habitat with suitable nectar sources for the species. One Crotch's bumble bees was observed within the project site during a focused survey on June 9, 2025 (Figure 2). No nests were observed on site; however, the site is suitable for Crotch's bumble bee nesting due to the presence of mammal burrows and leaf litter. Please refer to Appendix E for full survey results.

3.3.2.2 Wildlife Species of Special Concern and Watch List Species

California Horned Lark (Eremophila alpestris actia)

California horned lark is a CDFW SSC found from coastal deserts and grasslands to alpine dwarf-shrub habitat above tree line, and in coniferous or chaparral habitats. It is a common to abundant resident in a variety of open habitats, usually found in habitats where trees and large shrubs are absent. Within southern California, California horned larks nest on the ground in open fields, grasslands, and rangelands. Horned larks forage in areas with low-growing vegetation and feed primarily on grains and other seeds, shifting to mostly insects in the summer months. California horned lark breeds from March through July, with a peak in activity in May. Pairs do not maintain territories outside of the breeding season and instead form large gregarious, somewhat nomadic flocks.

Threats to California horned lark include habitat destruction and fragmentation. Habitats preferred by California horned lark are easily converted to other landscapes and human uses such as farmland and development. Pesticides have also been shown to poison and kill horned larks (Beason 1995). As a ground nester, California horned lark is vulnerable to mowing in a variety of habitats and pesticide use in agricultural fields.

Though California horned lark was not observed within the project site during biological surveys, this species in known to occur in the area. California horned lark has a moderate potential to occur is based on the presence of suitable foraging and nesting habitat within and around the project site.

Coastal Whiptail (Aspidoscelis tigris stejnegeri)

The coastal whiptail is a CDFW SSC. This subspecies is found west of the Peninsular Ranges, south of the Transverse Ranges, and north into Ventura County and ranges south into Baja California, Mexico. Suitable coastal whiptail habitat can be found in rocky, sandy, dry habitats including sage scrub, chaparral, woodlands, and riparian areas on friable loose soil.

Threats to this species are habitat degradation and destruction. Isolated populations are separated by development and are unlikely to cross highways or densely urbanized areas. However, species of this family typically have home ranges less than 2.5 acres (Anderson 1993); therefore, the scrub

habitat found on site, though disturbed in some areas, could support this species. Coastal whiptail was observed on site during a biological survey on May 22, 2025.

Coast Horned Lizard (Phrynosoma blainvillii)

Coast horned lizard is a CDFW SSC and ranges from Shasta County, south to northern Baja California, Mexico in scattered populations. The coast horned lizard inhabits grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. In southern California, the species is most often found where its prey, native ants, are present, and little to no invasive Argentine ants (*Linepithema humile*) are found, as these are not a suitable replacement food source (Suarez et al. 2000). Threats to this species include habitat loss and fragmentation, and the spread of invasive ants displacing its native ant prey.

Suitable disturbed native scrub habitat was recorded on site, but native prey species were not observed. No coast horned lizards were observed within the survey area during field and species-focused surveys; however, given this species' small home ranges and sedentary habits, the site has a low-to-moderate potential to support this species.

Cooper's Hawk (Accipiter cooperii)

Cooper's hawk is a CDFW WL species. Cooper's hawk breeds throughout the United States and into Canada and Mexico. In California, Cooper's hawk nests in live oak, riparian, and other forest habitats from sea level to 9,000 feet amsl. Cooper's hawk is tolerant of human disturbance and habitat fragmentation and nests in suburban and urban settings (Murphy et al. 1988). Cooper's hawk hunt in open woodland and habitat edges, catching avian prey in the air, on the ground, and in vegetation. Cooper's hawk hunts a variety of small birds and may also hunt small mammals, reptiles, and amphibians. Their nest is typically a platform of sticks and twigs lined with bark (Call 1978) and eggs are laid in February through June with the clutch size of 4 to 5 eggs (Brown and Amadon 1968).

Declines among populations of Cooper's hawk in Southern California can be largely attributed to habitat loss, especially in riparian areas. Other threats include direct or indirect human disturbance at nest sites, and eggshell thinning from pesticide use, although this threat is largely abated through the change in pesticide chemicals used after the 1970's (Terres 1980).

During a burrowing owl survey on January 7, 2025, one adult Cooper's Hawk was observed flying above the project site before perching atop a building in the northern buffer of the project site during a biological survey (Figure 2).

Costa's Hummingbird (Calypte costae)

Costa's hummingbird is a USFWS BCC. It is found year-round in southern California, southwestern Arizona, the Baja peninsula, and northwestern Mexico. It's breeding range extends further into the southwestern United States and northwestern Mexico and its wintering range extends south to the western coast of central Mexico. In California, Costa's hummingbird inhabits Sonoran and Mojave desert scrub, chaparral, and sage scrub. In the Mojave they are typically found in scrub and woodland habitats near springs and streams with cottonwoods, brittlebrush, and four-winged saltbush among other trees and shrubs (Baltosser and Scott 1996).

This species feeds on nectar and small flying insects. They nest about three to seven feet above ground in shrubs, often with little vegetative cover (Baltosser and Scott 1996). The greatest threats to Costa's hummingbird are conversion of desert scrub to developed land and livestock grazing.

One Costa's hummingbird was observed on site during a rare plant survey on May 8, 2025 (Figure 2).

Lawrence's Goldfinch (Spinus lawrencei)

Lawrence's goldfinch is a USFWS BCC found in chaparral, open woodlands, riparian, disturbed lands, weedy fields, semi-urban, and agricultural land (Watt et al. 2016). The species breeds in central and southern California, west of the Sierra Nevada and south into Baja California (Cornell University 2019).

Like many goldfinches, the Lawrence's goldfinch eats almost exclusively seeds, mostly from annual plants, and may rarely supplement their diet with insects, buds, or fruits (Watt et al. 2016). This species is gregarious and travels in flocks year-round. Lawrence's goldfinch lays a clutch of three to six eggs in a loose cup of leaves and grass stems placed in a forked branch a tree or shrub (Cornell University 2019). Threats to Lawrence's goldfinch include habitat destruction and degradation, specifically overgrazing and non-native plant colonization (Cornell Lab of Ornithology 2019).

Three Lawrence's goldfinches were observed on site during a rare plant survey on May 8, 2025 (Figure 2).

Loggerhead Shrike (Lanius ludovicianus)

Loggerhead shrike is a CDFW SSC and is a non-migratory year-round resident in southern California. Loggerhead shrikes prefer open habitat, typically with short vegetation and scattered shrubs. This species consumes a diet mainly consisting of insects but also feeds on reptiles, birds, and small mammals. Loggerhead shrikes use a feeding technique where the bird impales prey on spines or thorns of shrubs. Thus, loggerhead shrike suitable habitat requires vegetation with spines or thorns (Yosef 1996), or artificial objects such as barbed wire.

Leading causes of decline for this species include urban development and ingestion of pesticide-laden prey. Loggerhead shrike numbers are still fairly large across North America; however, the species has dramatically declined over the past century (Yosef 1996).

No loggerhead shrike was observed within the survey area during biological surveys; however, the site has a low-to-moderate potential to support this species due to the presence of suitable chaparral habitat and recent nearby observations of this species by RBC biologists.

Merlin (Falco columbarius)

Merlin is a CDFW WL species and uncommon winter migrant in the low elevations of California (i.e., less than 3,900 feet amsl). Merlin prefers coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, deserts, and herbaceous stage habitats. This species relies on a diet primarily comprised of small birds and occasionally preys on insects and small mammals. Shorelines act as particularly important hunting grounds during winter months.

Merlin experienced stark population declines from pesticide use prior to environmental legislation in 1972. Since the ban of harsh pesticides, populations have increased slowly, though sightings in southern California are still considered rare (Zeiner et al. 1990).

No merlin was observed during biological surveys. The project site supports semi-open disturbed areas that are marginally suitable for merlin foraging and is within the elevational range preferred by this species. Suitable roosting habitat is not present, and this species is not known to nest in California. Merlin has a low-to-moderate potential to occur on site due to suitable foraging conditions and recent nearby observations of this species by RBC biologists.

Prairie Falcon (Falco mexicanus)

Prairie falcon is a CDFW WL species. It ranges from southeastern desert northwest through the Central Valley. Typical habitats include annual grasslands, savannahs, agricultural fields, and desert scrub. They primarily nest in natural crevices or ledges on steep bluffs and cliffs up to 11,000 feet (Cornell Lab of Ornithology 2019).

No prairie falcon was observed in the project area during biological surveys. Marginally suitable foraging habitat is present on site in open disturbed habitat; however, suitable nesting habitat does not occur within the project site. Prairie falcon has a low-to-moderate potential to occur on the project site due to foraging conditions and recent nearby observations of this species by RBC biologists.

Southern California Legless Lizard (Anniella stebbinsi)

Southern California legless lizard is a CDFW SSC and ranges from Contra Costa and San Joaquin Counties to the Mexican border. This species is a secretive fossorial lizard known to occur in coastal dune, valley-foothill, chaparral, and coastal scrub habitats (CDFW 2000). These lizards sometimes seek cover under surface objects such as flat boards and are often found buried in leaf litter. Southern California legless lizards commonly burrow near the surface through loose soil and forage for larvae and small arthropods (CDFW 2000).

No Southern California legless lizards were observed on site during general and focused burrowing owl species surveys. In addition, this species was searched for during focused rare plant surveys and was not observed on site. In 2018, this species was observed approximately two miles northwest of the project site (CDFW 2025c). Suitable habitat for this species is present on site in chaparral habitat under trees and shrubs with leaf litter and soft soils. Due to the presence of suitable conditions and the recent nearby observation, Southern California legless lizard has a moderate potential to occur within the project site.

3.3.2.3 Critical Habitat

The ESA defines critical habitat as a specific geographic area, or areas, that contains features essential for the survival and recovery of endangered and threatened species. USFWS designates critical habitat for endangered and threatened species and may include sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat may also include areas that are not currently occupied by the species, but that will be needed for its recovery.

No USFWS designated critical habitat overlaps with the project site; however, there is critical habitat for San Bernadino kangaroo rat less than 700 feet west of the site (Figure 3a). This area of critical habitat is separated from the project site by a paved road and is now developed. Additional critical habitat can be found approximately a 0.5 mile north of the site but is separated from the project site by dense development (Figure 3a).

3.4 WILDLIFE CORRIDORS

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat (Ogden Environmental and Energy Services 1996). Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Corridors can consist of large, linear stretches of connected habitat (such as riparian vegetation) or as a sequence of stepping-stones across the landscape (discontinuous areas of habitat such as wetlands and ornamental vegetation), or corridors can be larger habitat areas with known or likely importance to local fauna.

Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development (Ogden Environmental and Energy Services 1996). A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate vegetation communities must be present to provide food and cover for both transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

Based on a review of the CDFW Biogeographic Information and Observation System data, no wildlife movement corridors are mapped within the project site (CDFW 2025c). The land within and around the project site is designated as Rank 1, “Limited Connectivity Opportunity,” and Rank 2, “Large Natural Habitat Areas.” These ranks are the two lowest within the Terrestrial Connectivity, Areas of Conservation Emphasis (ACE) dataset (CDFW 2025c). Although the project site supports chaparral and Riversidean sage scrub habitat, it is surrounded by development and has been previously disturbed. There are no large areas of native vegetation contiguous with the habitat on site; however, the project site is less than one mile south of a “less permeable” California Essential Habitat Connectivity (CEHC) Essential Connectivity Area and a Natural Landscape Block associated with Lytle Creek Wash (CDFW 2025c). Lytle Creek Wash also contains a Missing Linkage in California’s Landscape as mapped by the Science & Collaboration for Connected Wildlands organization. Due to the site’s proximity to an important connectivity area and the presence of some native habitat on site, the project area could potentially be used by wildlife as a refuge between larger areas of naturally occurring habitat.

3.5 POTENTIAL FEDERAL AND STATE JURISDICTIONAL AQUATIC RESOURCES

No aquatic resources were identified within the project site and 50-foot buffer during desktop review of the NWI, NHD databases, and historic aerial photos. Additionally, during the constraints-

level aquatic resources assessment on October 29, 2024, no aquatic resources potentially jurisdictional per the Corps, RWQCB, and/or CDFW were observed within the project site. Lastly, all soil types documented within review area are not considered hydric nor are there vegetation communities occurring within the review area that containing riparian and/or hydrophytic species.

4 IMPACT ANALYSIS

Direct impacts are caused by the project and occur at the same time and place as the project. Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Direct impacts would include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; and diverting natural surface water flows. Direct impacts could include injury, death, and/or harassment of listed and/or special-status species. Direct impacts could also include the destruction of habitats necessary for species breeding, feeding, or sheltering. Direct impacts on plants can include crushing of adult plants, bulbs, or seeds.

Indirect impacts can result from project-related activities where biological resources are affected in a manner that is not direct. Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants (weeds). As noted in Section 2, the survey area included a 100-foot buffer to identify nearby biological resources and to aid in the assessment of potential indirect impacts on protected resources, if present.

Cumulative impacts refer to incremental individual environmental effects of two or more projects when considered together. Such impacts taken individually may be minor but are collectively significant in light of regional impacts.

The significance thresholds as outlined in Appendix G of the state CEQA Guidelines (CCR Title 14, Division 6, Chapter 3, Sections 15000–15387) have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. A significant biological resources impact would occur if the project would:

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;

6) Conflict with the provisions of an adopted HCP; NCCP or other approved local, regional, or state HCP.

CEQA Threshold 1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

4.1 SPECIAL-STATUS PLANTS AND WILDLIFE IMPACTS

4.1.1 SPECIAL-STATUS PLANT SPECIES

Threatened and Endangered Plant Species

The proposed project will not impact federally and/or state listed plants as none are present and none have a moderate to high potential to occur within the project site due to lack of suitable habitat and the isolated nature of the site.

Other Special-Status Plant Species

Focused surveys for Parry's spineflower (CRPR 1B.1) were conducted due to the moderate potential for this species to occur on the project site. Surveys were positive for Parry's spineflower; thus, this species may be impacted with project implementation, as discussed below. The proposed project will not impact other special-status plants as no additional special-status species were observed and none have a moderate to high potential to occur within the project site due to lack of suitable habitat.

Parry's Spineflower

As observed during 2025 rare plant surveys, the project site supports Parry's spineflower. Parry's spineflower is rare and considered seriously threatened in California; over 80% of occurrences are threatened or have a high degree and immediacy of threat (CNPS 2024). Direct impacts through the crushing of adult plants, bulbs, or seeds could occur with project implementation. Vegetation removal or operation of heavy machinery during construction activities may result in harm or mortality of Parry's spineflower, potentially resulting in significant impacts on Parry's spineflower.

Due to the location of the Parry's spineflower population on site, direct impacts are unavoidable; therefore, compensatory mitigation would be implemented as outlined in Section 5 (BIO-2). Parry's spineflower habitat would be conserved, enhanced, or restored at a minimum ratio of 1:1 and a rare plant mitigation plan will be developed and implemented. With successful implementation of the measures outlined in BIO-2, direct impacts on Parry's spineflower would be reduced to less than significant.

Indirect impacts on Parry's spineflower could occur if Parry's spineflower occurs in areas nearby to the project site and invasive plants are introduced during or after project activities are concluded. Invasive plants produce competition which may negatively impact the proliferation and survivorship of Parry's spineflower. As such, the introduction of invasives shall be avoided within and adjacent

to the project area (BIO-1I). With adherence to BIO-1I, indirect impacts on Parry's spineflower as a result of the project are anticipated to be less than significant.

4.1.2 SPECIAL-STATUS WILDLIFE SPECIES AND CRITICAL HABITATS

Threatened and Endangered Wildlife Species

Despite negative survey results, suitable habitat for burrowing owl (state candidate species for listing under the CESA) is present on site; therefore, this species may be impacted by project implementation if present on site during construction, as discussed below. Crotch's bumble bee (state candidate for listing under the CESA) was observed on the project site and may be impacted by project implementation, as discussed further below.

The proposed project will not impact any additional federally and/or state listed wildlife species as no additional listed species were observed during general biological surveys and none have moderate to high potential to occur on site based on lack of suitable habitat and the isolated nature of the site.

Burrowing Owl

Project implementation may impact burrowing owl, a candidate for listing under CESA. Although focused surveys were negative for burrowing owl, suitable burrows and habitat are present. Due to their migratory behavior and ability to disperse, burrowing owl may occur on the project site in the future.

With project implementation, direct impacts on burrowing owl could occur in the form of death, injury, or harassment of nesting birds, their eggs, and their young, if owls are present. Such impacts, if they were to occur, are potentially significant due to the direct reduction in local populations and loss of genetic diversity. Injury or mortality occurs most frequently during the vegetation clearing stage of construction and affects eggs, nestlings, and recently fledged young that cannot safely avoid equipment. In addition, impacts on burrowing owl could occur if owls were to enter the project site during active construction. Burrowing owls are particularly susceptible to vehicle strikes because they utilize roadways and adjacent areas for hunting. Also, burrowing owls are known to use manmade materials, such as pipes and culverts, for shelter and nesting. Impacts on burrowing owl, if they were to subsequently inhabit the site, are potentially significant.

To avoid such direct impacts on burrowing owls, the following measures would be implemented:

- Prior to initial ground disturbing activities, construction personnel would be provided training with instructions to follow in the event a burrowing owl is observed or suspected to be on site (BIO-1J).
- Pre-construction burrowing owl clearance surveys would be conducted in accordance with CDFW BUOW Guidelines to ensure no occupied burrowing owl burrows are present within or adjacent to construction areas during ground disturbance (BIO-3A).

- If burrowing owls are detected on site or within a 500-foot buffer of the site, all project activities would be halted and CDFW would be contacted. Work would not resume until CDFW's review and approval of a Burrowing Owl Plan and/or CESA Incidental Take Permit (ITP) under CFGC section 2081 (BIO-3B).

Direct impacts on burrowing owl could still occur if owls enter the project site during active construction. Burrowing owls are particularly susceptible to vehicle strikes because they utilize roadways and adjacent areas for hunting. To avoid such impacts on burrowing owl, speed limits would be set and enforced (BIO-1A). In addition, burrowing owls are known to use manmade materials, such as pipes and culverts, for shelter and nesting. Best management practices (BMPs) would be implemented to minimize the potential for burrowing owls to use staged project materials (BIO-1B); thereby reducing the likelihood of burrowing owl being impacted by construction activities.

With implementation of the pre-construction clearance surveys, CDFW consultation, and best management practices as outlined in BIO-1 and BIO-3, direct impacts on burrowing owls, if present, would be reduced to less than significant.

Indirect impacts on burrowing owl could occur if burrowing owl is present adjacent to the project site and construction occurs at night using lighting. Such impacts are potentially significant because lights could reduce burrowing owls' hunting success and make burrowing owls easier targets for predators. To avoid impacts on burrowing owl from nighttime construction and lighting, construction would occur during the day to the greatest extent feasible (BIO-1C). In addition, indirect impacts on burrowing owl, if present, in suitable habitat west of the project site, could during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect burrowing owl behavior. In addition, burrowing owl pre-construction surveys would include a 500-foot buffer around the project site; therefore, burrowing owls occurring near to the site would be detected, if present (BIO-3A). If burrowing owls are detected within 500-feet of the project site, CDFW would be consulted for additional guidance (BIO-3B). As such, indirect impacts during project construction are anticipated to be less than significant.

With the adherence of mitigation measures as discussed in Section 5, impacts on burrowing owls resulting from the project would be less than significant.

Crotch's Bumble Bee

Crotch's bumble bee was observed during a focused survey on June 9, 2025. Suitable nectar sources and habitat (i.e., small rodent burrows) are present on the project site and, although nests were not observed, the potential for nesting on site is moderate. Due to species presence, the project could result in direct impacts on Crotch's bumble bee in the form of death, injury, or harassment if Crotch's bumble bee were to occur within the project site in the future and, if present, destruction of nesting sites could result in significant direct take of Crotch's bumble bee. Impacts are potentially significant.

To avoid such direct impacts on Crotch's bumble bee, the following measures would be implemented:

- Prior to initial ground disturbing activities, construction personnel would be provided training with instructions to follow in the event a Crotch's bumble bee nest is observed or suspected to be on site (BIO-1J).
- Pre-construction Crotch's bumble bee surveys would be conducted in accordance with the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2024b) to locate any active Crotch's bumble bee nests within or adjacent to construction areas (BIO-4A).
- If Crotch's bumble bee nests are detected on site or within a 500-foot buffer of the site, avoidance and minimization measures as outlined in project-specific permits (i.e., CESA ITP) would be followed to ensure unauthorized take does not occur (BIO-4B).

Direct impacts on Crotch's bumble bee could still occur if bees enter the project site during active construction. To avoid such impacts on Crotch's bumble bee, a qualified biological monitor would be present on site during removal of suitable nectar sources (BIO-4C). The biological monitor would have the authority to stop work to allow Crotch's bumble bee to move out of harm's way.

With the successful implementation of the BMPs listed in Section 5, some direct impacts on Crotch's bumble bee within the project site would be avoided or minimized. However, project implementation could still result in potential impacts on Crotch's bumble bee through destruction or degradation of suitable habitat, including nectar sources and potential nest burrows. This impact is potentially significant because Crotch's bumble bee has been documented on site.

Compensatory mitigation would be provided for removal of Crotch's bumble bee habitat (BIO-4B). Exact mitigation shall be determined through coordination with CDFW during CESA permitting, and is anticipated to include, but may not be limited to, the following:

- Purchase of Crotch's bumble bee suitable habitat credits at a CDFW-approved mitigation bank (minimum 1:1 ratio for high-quality habitat) or
- Off-site acquisition and preservation of land suitable to support Crotch's bumble bee (minimum 1:1 ratio for high-quality habitat).

With implementation of BIO-4B and the adherence to any project-specific permit conditions, direct impacts on Crotch's bumble bee resulting from the project are anticipated to be less than significant.

Indirect impacts on Crotch's bumble bee, if present adjacent to the project site, could during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect Crotch's bumble bee behavior. As such, indirect impacts during project construction are anticipated to be less than significant.

With adherence to the mitigation measures described in Section 5, potential impacts on Crotch's bumble bee would be reduced to less than significant. If Crotch's bumble bee is no longer a candidate or listed species under CESA at the time of project construction, then mitigation measures shall not be required.

Other Special-Status Wildlife Species

Four non-listed special-status wildlife species, Cooper's hawk, coastal whiptail, Costa's hummingbird, and Lawrence's goldfinch, were observed on site during biological surveys. Six additional non-listed special-status wildlife species have moderate or low-to-moderate potential to occur on the project site: California horned lark, loggerhead shrike, prairie falcon, merlin, coast horned lizard, and Southern California legless lizard. Analysis of each of these species is discussed below.

California Horned Lark, Costa's Hummingbird, Lawrence's Goldfinch, and Loggerhead Shrike

Costa's hummingbird and Lawrence's goldfinch were observed on site and California horned lark and loggerhead shrike have moderate potential to occur on the project site; therefore, direct impacts through loss of suitable foraging habitat could occur with project implementation. However, Costa's hummingbird, Lawrence's goldfinch, California horned lark, and loggerhead shrike inhabit a wide variety of habitats and are relatively tolerant of disturbance. Suitable foraging habitat for these species is present within proximity to the project site and is abundant throughout the region. In addition, compensatory habitat mitigation lands for Crotch's bumble bee are likely to be suitable for these four non-listed avian species. As such, removal of suitable foraging habitat would be less than significant.

Project construction activities could result in direct impacts on nesting Costa's hummingbird, Lawrence's goldfinch, California horned lark, and loggerhead shrike, if nests are present. Vegetation trimming or removal of suitable habitat within an active breeding territory could result in harassment, injury, damage or destruction of an active nest, and/or death of adults, eggs, and/or young during construction activities. Impacts are potentially significant. To avoid or minimize such impacts on non-listed special-status avian species, best management practices and pre-construction surveys are required as outlined in BIO-1D and BIO-5.

Indirect impacts on Costa's hummingbird, Lawrence's goldfinch, California horned lark, and loggerhead shrike, if present adjacent to the project site, could occur during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect Costa's hummingbird, Lawrence's goldfinch, California horned lark, or loggerhead shrike behavior. As such, indirect impacts during project construction are anticipated to be less than significant.

Cooper's Hawk, Prairie Falcon, and Merlin

One adult Cooper's hawk was observed flying overhead during a biological survey. The hawk flew over the project site and was not observed directly using it. Although the project site supports suitable foraging habitat for Cooper's hawk, this species is not expected to rely on the habitat on the project site. Removal of foraging habitat as a result of project implementation is anticipated to be less than significant due to the abundance of suitable Cooper's hawk habitat throughout the region. Prairie falcon and merlin both have low-to-moderate potential to occur on the project site. Due to the low-quality foraging habitat on site and proximity to preferred foraging areas, these species are also not expected to rely on the project site. Suitable nesting habitat is not present for any of these raptor species. Prairie falcon primarily nests on ledges and cliffs which are absent

from the project site, and merlin is not known to nest in Southern California. The project site also lacks woodlands appropriate for Cooper's hawk nesting. Thus, these species are not anticipated to nest on or immediately adjacent the site and impacts on Cooper's hawk, prairie falcon, and merlin would be less than significant.

Coastal Whiptail, Coast Horned Lizard, and Southern California Legless Lizard

Coastal whiptail was observed on site and coast horned lizard and Southern California legless lizard have low-to-moderate and moderate potential to occur on site, respectively. Project construction activities could result in potential direct impacts on these special-status species, if present on site. Vegetation clearing and grading and other construction activities could result in harassment, injury, and/or death of coastal whiptail, coast horned lizard and Southern California legless lizard; such impacts on these special-status species are potentially significant.

The project site supports approximately 28.6 acres of native upland habitat, the on-site chaparral and sage scrub are disturbed and isolated from other areas of suitable native habitat. Coastal whiptail, coast horned lizard, and Southern California legless lizard exhibit high site fidelity and are not capable of dispersing long distances through urban environments. As such, on site habitat, if occupied by special-status lizards, does not contribute to the species' long-term survival. The surrounding urban landscape acts as a barrier to dispersal, cutting off special-status lizard populations, if present, from other populations, limiting genetic diversity and effectively creating a 'sink'. Other natural lands in the project vicinity, such as Lytle Creek, Jurupa Hills, the Santa Ana River corridor, and the Cucamonga Wilderness provide suitable habitat with connectivity to other populations. As such, loss of on-site suitable habitat would be adverse but not result in a significant impact on the species or habitat due to the lack of value this land provides to the long-term viability of the species.

To avoid or minimize potential direct harassment, injury, and mortality impacts, pre-construction and protection measures outlined in BIO-1 and BIO-6 would be implemented. If pre-construction surveys are positive, relocation of all observed special-status lizard individuals shall be attempted and, if feasible, lizards would be relocated to the nearest available suitable habitat on conserved land in consultation with CDFW. Successful implementation of such measures, described further in Section 5, would help minimize or avoid potential direct impacts on coastal whiptail, coast horned lizard, and Southern California legless lizard, if present.

CEQA Threshold 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS?

4.2 NATIVE VEGETATION IMPACTS

The proposed project would result in impacts on five land uses/vegetation communities, developed land, disturbed land, Riversidean sage scrub, disturbed Riversidean sage scrub, and chamise chaparral (Figure 5; Table 6). Developed land and disturbed land are not considered native vegetation communities; however, impacts on isolated native upland habitat (e.g., disturbed Riversidean sage scrub), will occur with project implementation. Chamise chaparral, Riversidean

sage scrub, and disturbed Riversidean sage scrub are not considered sensitive natural communities under CEQA and impacts on these communities are not anticipated to be significant due to their abundance in the region. Therefore, impacts to native vegetation communities resulting from the project would be less than significant.

Table 6. Vegetation Communities/Land Cover Project Impacts

Vegetation (Holland)[1]	**Vegetation[2]**	**Impacts (onsite + offsite improvements; acres)**
Developed	Developed/Disturbed	8.4
Disturbed	Developed/Disturbed	7.2
Disturbed Riversidean Sage Scrub	*Eriogonum fasciculatum* Shrubland Alliance	12.9
Riversidean Sage Scrub	*Eriogonum fasciculatum* Shrubland Alliance	5.4
Chamise Chaparral	*Adenostoma fasciculatum* Shrubland Alliance	10.4
	Total[3]	**44.2**

[1] *Vegetation communities recognized by Holland (1986)*
[2] *Vegetation communities from Holland (1986) crosswalked to Sawyer et al. (2009)*
[3] *Acreages summed using raw numbers provided during GIS analysis (available upon request) and thus the sum of the total rounded numbers may not directly add up in this table*

CEQA Threshold 3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

4.3 POTENTIALLY JURISDICTIONAL AQUATIC RESOURCES IMPACTS

No potentially jurisdictional aquatic features were observed on the project site; therefore, impacts on aquatic resources are not anticipated.

CEQA Threshold 4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

4.4 NESTING BIRD IMPACTS

The proposed project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities are initiated during the nesting season. The project site has the potential to support avian nests and impacts on nesting birds are prohibited by the MBTA and/or CFGC §3503. To avoid potential direct impacts on nesting birds, removal of suitable nesting habitat would occur outside of the breeding season (BIO-4A), when feasible. In addition, within three days prior to site disturbance or construction activities, a biologist would conduct a nesting bird survey (BIO-4B). If active nests are found, construction activity would be avoided in a buffer

area around the nest until nestlings have fledged and the nest is determined to be inactive, and a biologist would be retained to monitor nesting activity (BIO-4C). With the adherence of such mitigation measures, described further in Section 5, impacts on nesting birds resulting from the project would be less than significant.

4.5 WILDLIFE CORRIDOR IMPACTS

The project site does not likely function as part of a regional wildlife corridor. The project site is composed of both disturbed and undisturbed habitats that are surrounded by development. No large areas of native vegetation are contiguous with the site; however, important connectivity corridors occur less than one mile north of the project site in association with Lytle Creek Wash. Due to the site's proximity to an important connectivity area, the project area could potentially be used by wildlife as a refuge between larger areas of naturally occurring habitat. However, due to surrounding development, primarily species capable of flight may use the site as a stepping-stone between habitats.

With project implementation, the site would no longer provide a stepping-stone refuge. However, other nearby green spaces, such as Alec Fergusson Park, Sierra Lakes, and Roger Birdsall Park, provide suitable refugia for flight-capable species. As such, wildlife corridor impacts resulting from project implementation would be less than significant.

CEQA Threshold 5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance?

4.6 LOCAL POLICIES AND ORDINANCES IMPACTS

4.6.1 COUNTY OF SAN BERNARDINO BURROWING OWL OVERLAY ZONE

As previously discussed, the project site is within the Burrowing Owl Overlay Zone. Pursuant to San Bernardino requirements, focused surveys and pre-construction surveys for burrowing owl are necessary to determine presence/absence within the project site. Focused surveys have been conducted, and the results are presented in Section 3. Pre-construction surveys would be conducted prior to project implementation, as detailed in Section 5. As such, the project would not conflict with the County of San Bernardino Biotic Resources Overlay Zones.

4.6.2 CITY OF RIALTO GENERAL PLAN

The project does not contain suitable soils for Delhi Sands flower-loving fly. As such, protocol surveys are not required, and the City of Rialto General Plan policy related to this species is not applicable.

CEQA Threshold 6: Conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP?

4.7 HABITAT CONSERVATION PLAN; NATURAL COMMUNITY CONSERVATION PLAN; OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN IMPACTS

The project site is not located within an active HCP or NCCP area; therefore, the project would not result in impacts on HCPs or NCCPs.

4.8 CUMULATIVE IMPACTS

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. 'Related projects' refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. The project site is disturbed, surrounded by development, and does not support sensitive natural vegetation communities. As such, the proposed project will not result in significant cumulative effects.

However, through the environmental review process, all projects in the region would be individually required to reduce their own impacts through compensatory mitigation, as well as other project-specific mitigation measures and avoidance and minimization measures. Compensatory mitigation would be subject to agency approval and would be planning with consideration to other open space preserved in perpetuity to create large, undisturbed habitat blocks. Because the impacts associated with the project would be fully mitigated, the cumulative contribution to region-wide impacts would be less than significant.

5 MITIGATION MEASURES

The following discussion provides project-specific mitigation measures; adherence with these measures is necessary to avoid and minimize impacts on biological resources resulting from the project.

5.1 BEST MANAGEMENT PRACTICES

BIO-1A: Construction vehicles shall not exceed 15 miles per hour on unpaved roads adjacent to the project site or the right-of-way accessing the site.

BIO-1B: The applicant, or its contractors, will screen, cover, or elevate at least one (1) foot above ground, all construction pipe, culverts, or similar structures with a diameter of three (3) inches or greater that are stored on site overnight. These pipes, culverts, and similar structures will be inspected by the project biologist for wildlife before such material is moved, buried, or capped.

BIO-1C: Construction activities shall occur during daytime hours to the greatest extent feasible. If construction must occur at nighttime, lights shall be oriented in such a way that they direct light downward and toward the active construction, ensuring that no direct light is emitted towards adjacent lands, and shields or deflectors shall be installed on lights to reduce light spill. Nighttime concrete pouring shall be performed in accordance with the City of Rialto Municipal Code.

BIO-1D: A biologist shall flush special-status species (i.e., avian or other mobile species), with the exception of burrowing owl, from suitable habitat areas within the project development footprint to the maximum extent practicable immediately (e.g., within 24 hours) prior to initial vegetation removal activities. The biologist shall flush wildlife by walking through habitat to be imminently removed and towards adjacent open space.

BIO-1E: At the end of each workday during construction, the applicant, or its contractors, will cover all excavated, steep-sided holes or trenches more than eight inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials, or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) constructed of earth fill or wooden planks. The applicant, or its contractors, will thoroughly inspect holes and trenches for trapped animals each workday.

BIO-1F: Contractors shall not permit pets on the construction site.

BIO-1G: If trash and debris need to be stored overnight during maintenance activities, fully covered trash receptacles that are animal-proof and weather-proof shall be used by the maintenance contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed or emptied each night.

BIO-1H: To prevent inadvertent disturbance to areas outside the limits of work, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary visibility construction fence) prior to ground-disturbance activities, and all construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits. The work limit delineation shall be maintained throughout project construction.

BIO-1I: The applicant, or its contractors, shall avoid the use of invasive plant species in the associated landscaping.

BIO-1J: Prior to initial ground disturbing activities, a Worker Environmental Awareness Program (WEAP) shall be prepared, which will include a training presentation and key fact sheet. The training will instruct construction crews to be aware of and recognize sensitive biological resources that may be encountered within, or adjacent to, the project. The training will provide workers with instructions to follow in the event a sensitive species is observed or suspected to be on site. Biologists shall provide WEAP training materials, including but not limited to the key fact sheet, to construction personnel before their commencement of work on the project. Additionally, all construction staff shall attend the WEAP training presentation prior to beginning work on site. Upon completion of the WEAP training, each member of the construction crew shall sign a form stating that they attended the training, understood the information presented, and agreed to comply with the requirements set out in the WEAP training. Biologists shall provide updates relevant to the training to construction personnel during the safety ("tailgate") meetings, as needed.

5.2 PARRY'S SPINEFLOWER AVOIDANCE AND MITIGATION MEASURES

BIO-2: Parry's spineflower (CRPR 1B.1) is present on site and impacts are unavoidable; therefore, compensatory mitigation shall be provided to offset impacts. A rare plant mitigation plan shall be prepared and implemented by the applicant or its designee. The plan will demonstrate the feasibility of conserving, enhancing, or restoring Parry's spineflower habitat in areas to be managed as natural open space without conflicting with other resource management objectives. Habitat conservation, enhancement, or restoration will be at a minimum 1:1 ratio (acres conserved, enhanced, or restored to acres impacted).

If the rare plant mitigation plan proposes conservation of an extant population, the plan shall include at a minimum: (a) the location of the conserved habitat and an analysis of its suitability as compensatory mitigation; (b) an assessment of the extant Parry's spineflower populations at the proposed conservation site; (c) a long-term management plan which includes objectives, management practices, monitoring protocols, adaptive management strategies, and reporting requirements; and (d) details regarding the establishment of a non-wasting endowment to perpetually fund management of the conserved land, or such other funding mechanism acceptable to CDFW.

If the rare plant mitigation plan proposes enhancement or restoration, the plan shall include at minimum: (a) collection/salvage measures for plants or seed banks, to retain intact soil conditions and maximize success likelihood; (b) details regarding storage of plants or seed banks; (c) location of the proposed recipient site, and detailed site preparation and plant introduction techniques details for top soil storage, as applicable; (d) time of year that the salvage and replanting or seeding will occur and the methodology of the replanting; (e) a description of the irrigation, if used; (f) success criteria; and (g) a detailed monitoring program, commensurate with the plan's goals.

5.3 BURROWING OWL AVOIDANCE AND MITIGATION MEASURES

BIO-3A: No less than 14 days prior to the onset of construction activities, a qualified biologist shall survey the construction limits of the project site and a 500-foot buffer for the presence of burrowing owls and occupied nest burrows. A second survey shall be conducted within 24 hours prior to the onset of construction activities. Time lapses between project activities greater than one week (7 days) would trigger subsequent 24-hour take avoidance surveys to confirm burrowing owl absence. The surveys shall be conducted in accordance with the most current CDFW survey methods. If burrowing owls are not observed during clearance surveys or biological monitoring, no additional conditions are required to avoid impacts to burrowing owl.

The project applicant shall submit at least one burrowing owl pre-construction survey report to the satisfaction of the City to document compliance with this mitigation measure. For the purposes of this measure, 'qualified biologist' is a biologist who meets the requirements set forth in the BUOW Guidelines (CDFW 2012).

BIO-3B: If burrowing owls, active burrows, or signs thereof are confirmed during any survey or biological monitoring, project activities with the potential to impact burrowing owl shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing project activities with the potential to impact burrowing owl. The Burrowing Owl Plan shall describe proposed avoidance, and monitoring actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. Project activities with the potential to impact burrowing owl shall not occur within 500 feet of an active burrow until CDFW approves the Burrowing Owl Plan.

If project activities, including occupied burrow exclusion and closure, could result in take of burrowing owl, the applicant shall coordinate with CDFW for appropriate CESA authorization (i.e., ITP under CFGC section 2081) prior to commencement of project activities with the potential to impact burrowing owl. The ITP shall describe, at a minimum, project activities and equipment, proposed avoidance/buffers, temporary and permanent impacts, monitoring, relocation and/or translocation, and minimization

and compensatory mitigation actions. ITP compensatory mitigation will be fulfilled by one or more of following options: 1) purchase of credits at a CDFW-approved conservation or mitigation bank (if available); 2) execution of a Mitigation Credit Agreement; or 3) Permittee-responsible mitigation land acquisition.

The conditions of the permit or measures outlined in the plan shall be adhered to by the applicant and any required compensatory mitigation of habitat would be provided.

5.4 CROTCH'S BUMBLE BEE AVOIDANCE AND MITIGATION MEASURES

BIO-4A: At a minimum, two pre-construction nesting surveys shall be conducted prior to project implementation. Surveys shall occur within 1) one week; and 2) within 24-hours prior to any vegetation removal or ground-disturbing activities scheduled to occur during the Crotch's bumble bee flight season (February through October). Surveys shall follow the guidelines provided in the CDFW's *Survey Considerations for CESA Candidate Bumble Bee Species* (2024b) and shall occur within the project site and areas adjacent to the project site where suitable habitat exists. The surveyors shall be qualified biologists familiar with Crotch's bumble bee identification and life history.

BIO-4B: Suitable Crotch's bumble bee habitat and Crotch's bumble bee presence has been confirmed on the site; therefore, a CESA ITP shall be applied for and obtained prior to the commencement of project activities with the potential to impact Crotch's bumble bee. The ITP shall include, at a minimum, a description of project activities and equipment, proposed avoidance/buffers, identification of temporary and permanent impacts, monitoring requirements, relocation and/or translocation protocols, and compensatory mitigation measures. Compensatory mitigation will be at a minimum 1:1 ratio (acres conserved, enhanced, or restored to acres impacted). ITP compensatory mitigation shall be satisfied by one or more of the following mechanisms: 1) purchase of credits at a CDFW-approved conservation or mitigation bank (if available); 2) execution of a Mitigation Credit Agreement; or 3) Permittee-responsible mitigation land acquisition.

BIO-4C: A qualified biological monitor shall conduct full-time monitoring during removal of suitable nectar plants that is scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October). The monitor shall have authority to temporarily halt or redirect activities as needed to avoid unauthorized impacts.

If Crotch's bumble bee is no longer a candidate or listed species under CESA at the time of project construction, then these mitigation measures shall not be required.

5.5 NESTING BIRD AVOIDANCE

BIO-5A: To ensure compliance with CFGC sections 3503, 3503.5, and 3513 and to avoid potential impacts to nesting birds, vegetation clearing and ground-disturbing

activities shall be conducted outside of the bird nesting season (generally February 15 through August 31), if feasible.

BIO-5B: Regardless of the time of year, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including but not limited to vegetation clearing, disking, demolition activities, staging, or grading.

BIO-5C: If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed. Buffer areas shall be avoided until the nests are no longer occupied, and the juvenile birds can survive independently from the nests. During construction activities, the qualified biologist shall continue biological monitoring activities at a frequency recommended by the qualified biologist using their best professional judgment. If nesting birds are documented, avoidance and minimization measures may be adjusted and construction activities stopped or redirected by the qualified biologist to avoid take of nesting birds.

If nesting birds are not documented during the pre-construction survey, adherence to additional measures may not be necessary to avoid impacts to nesting birds.

5.6 COASTAL WHIPTAIL, COAST HORNED LIZARD, AND SOUTHERN CALIFORNIA LEGLESS LIZARD AVOIDANCE AND MITIGATION MEASURES

BIO-6A: Within 30 days prior to the commencement of any on-site project activities, a qualified biologist shall conduct pre-construction surveys in suitable special-status lizard habitat throughout the project site. Project-related activities that would result in ground disturbance include any construction, vegetation removal, and equipment and vehicle access, parking, and staging.

The qualified biologist shall have familiarity with special-status lizard species as recognized by CDFW. A minimum of one daytime survey during suitable weather for lizard activity shall be conducted by walking linear transects spaced to provide 100 percent coverage of suitable habitat. The location of any observed special-status lizards shall be documented. If feasible, the locations of any special-status lizards shall be avoided. Avoidance measure shall be monitored by the qualified biologist.

BIO-6B: If pre-construction surveys are positive for coastal whiptail, coast horned lizard, or Southern California legless lizard and avoidance is not feasible, CDFW shall be notified in writing. In addition, relocation of all observed special-status lizard individuals shall be attempted and, if feasible, lizards would be relocated to the nearest available suitable habitat on conserved land in consultation with CDFW.

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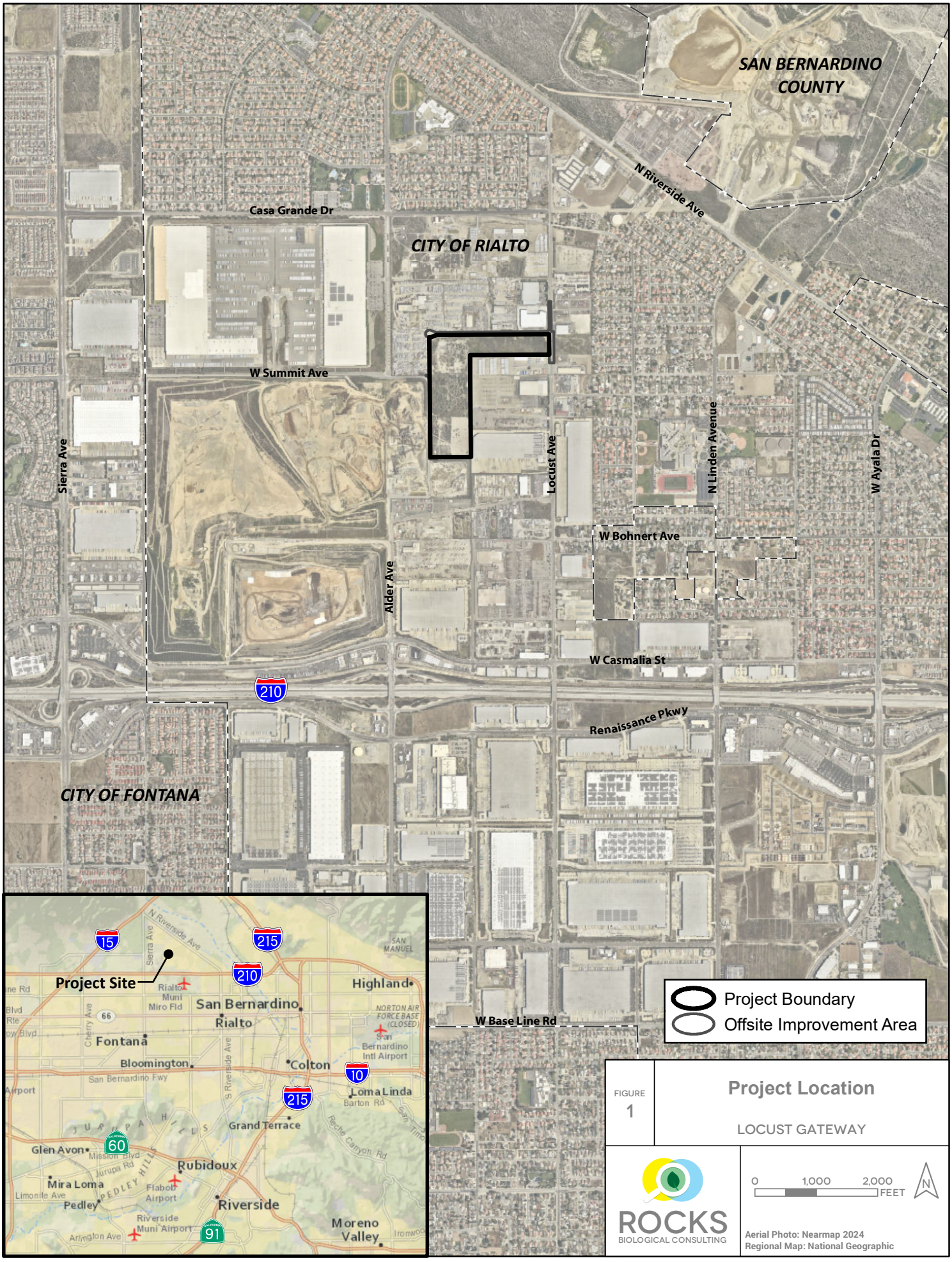


FIGURE 1

Project Location

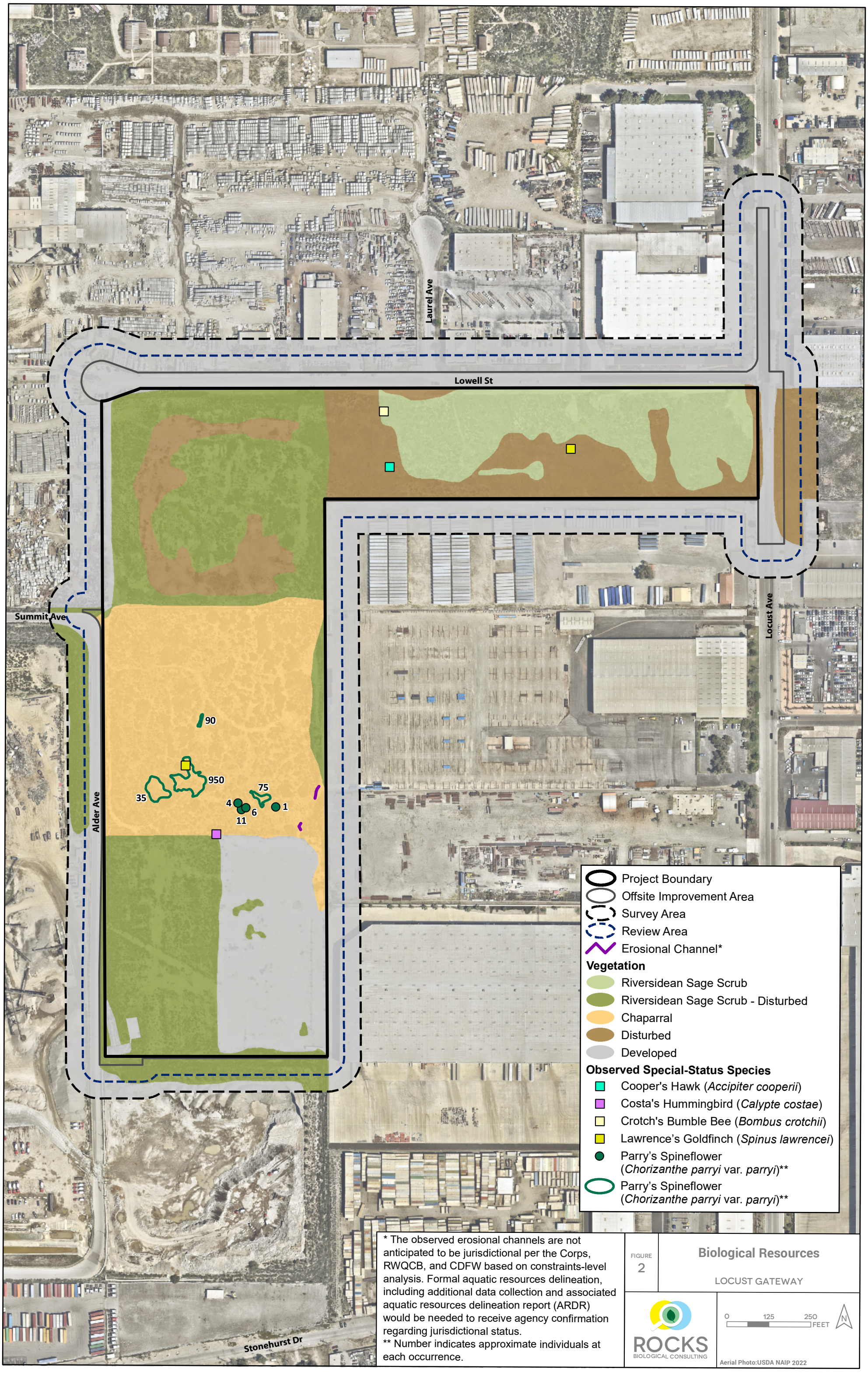
LOCUST GATEWAY

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Aerial Photo: Nearmap 2024
Regional Map: National Geographic



* The observed erosional channels are not anticipated to be jurisdictional per the Corps, RWQCB, and CDFW based on constraints-level analysis. Formal aquatic resources delineation, including additional data collection and associated aquatic resources delineation report (ARDR) would be needed to receive agency confirmation regarding jurisdictional status.
** Number indicates approximate individuals at each occurrence.

FIGURE 2

Biological Resources

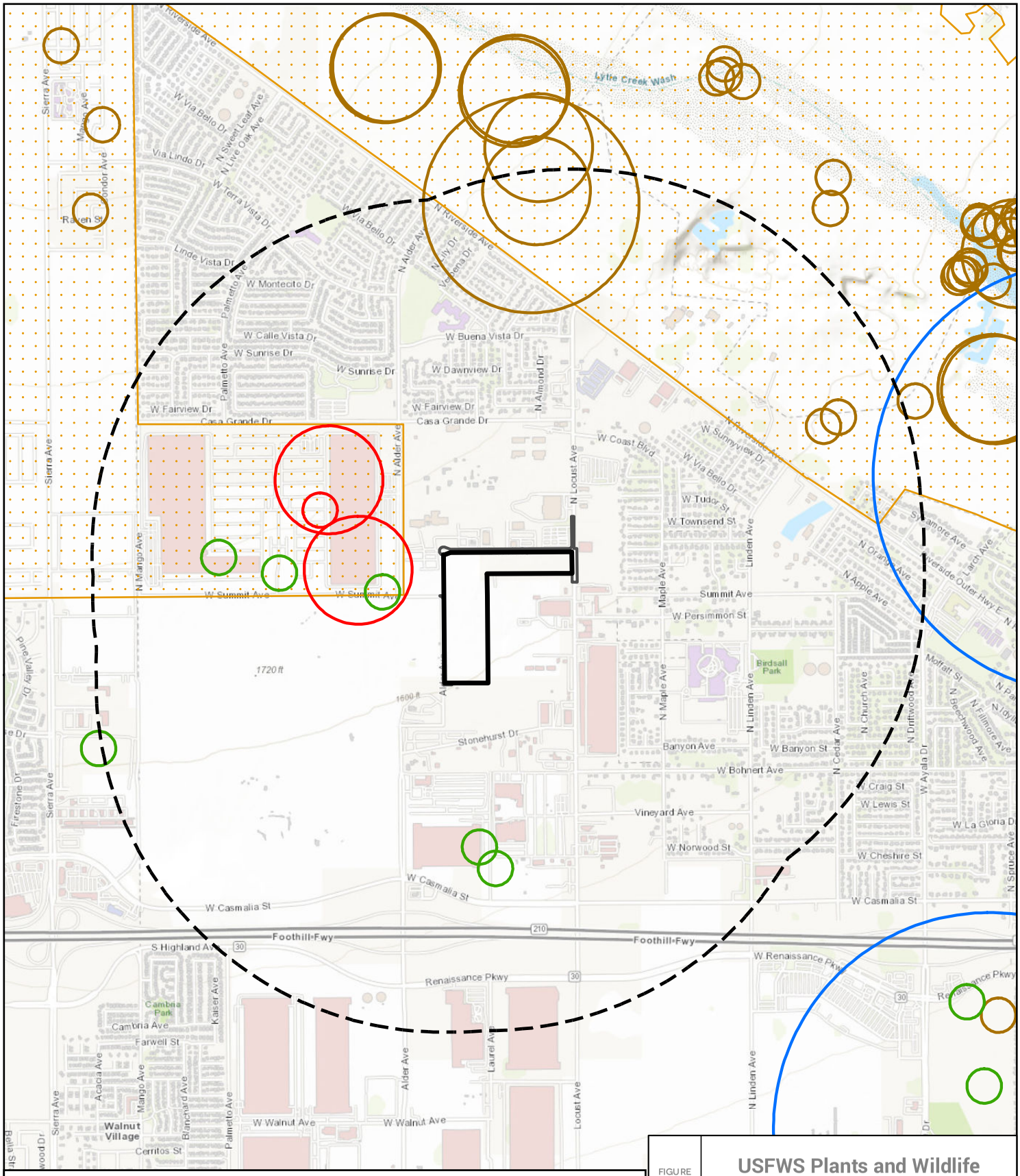
LOCUST GATEWAY

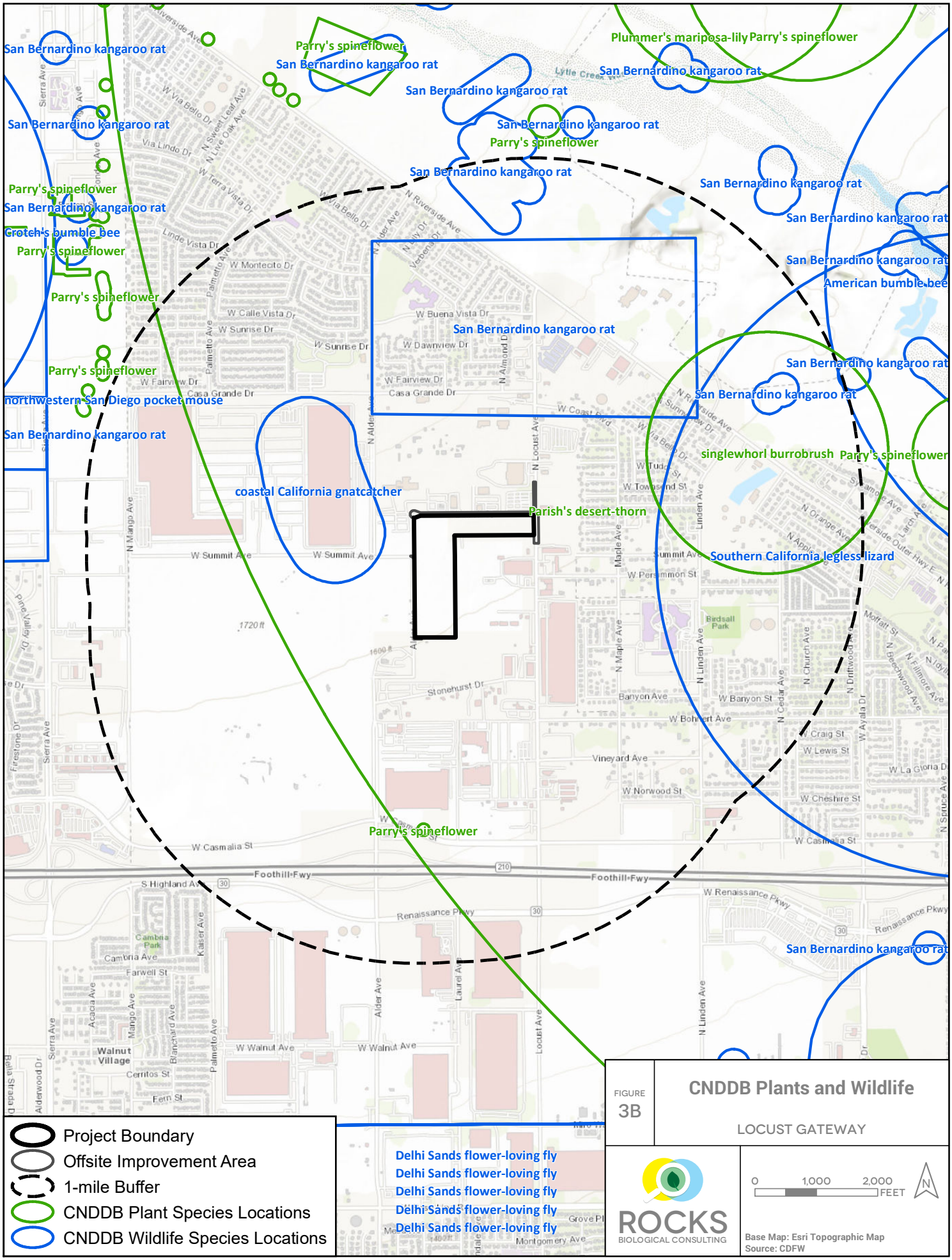
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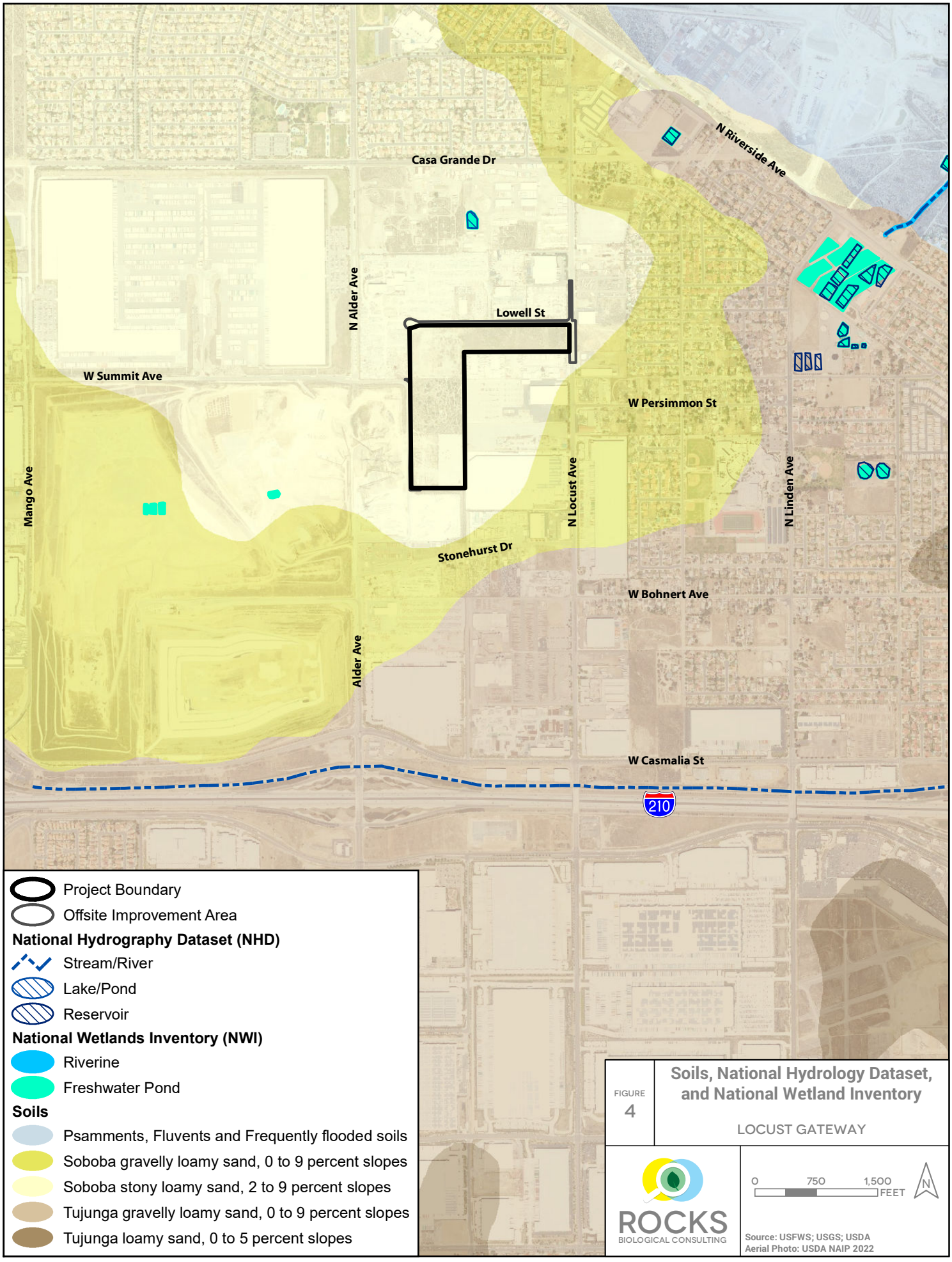
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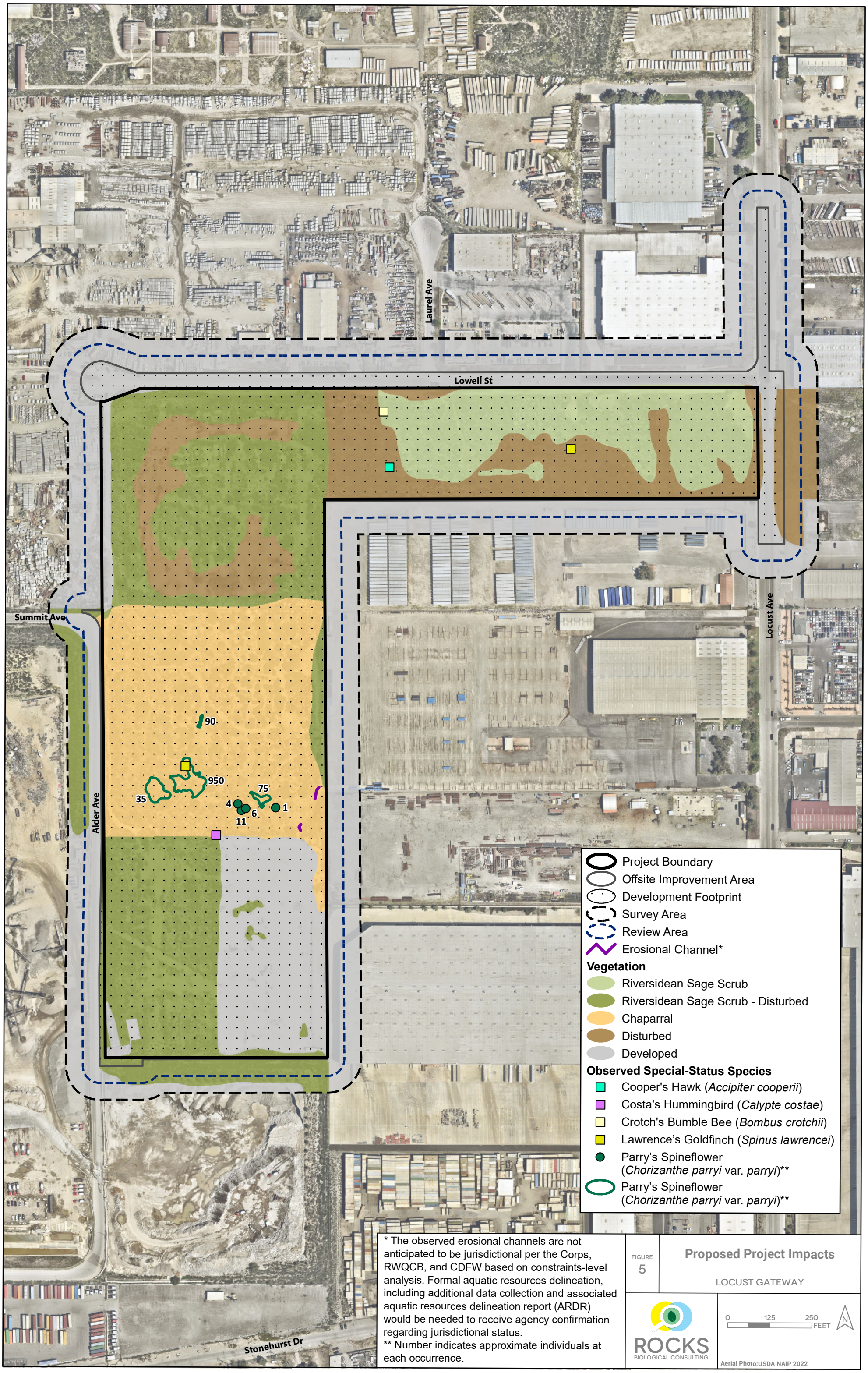
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Aerial Photo:USDA NAIP 2022


Project Boundary
Offsite Improvement Area
1-mile Buffer
San Bernardino Kangaroo Rat Critical Habitat
USFWS Species Locations
Burrowing Owl
Coastal California Gnatcatcher
Least Bell's Vireo
Los Angeles pocket mouse
San Bernardino Kangaroo Rat
Foothill Fwy
Foothill Fwy
W Casmalia St
Renaissance Pkwy
W Summit Ave
Summit Ave
W Coast Blvd
N Locust Ave
Linden Ave
Maple Ave
Birdsall Park
Vineyard Ave
W Norwood St
W Cheshire St
W Lewis St
W Craig St
W Bohnert Ave
W Banyon St
Banyon Ave
Stonehurst Dr
W Persimmon St
W Townsend St
W Tudor St
W Via Bello Dr
W Sunnyview Dr
W Buena Vista Dr
W Dawnview Dr
W Fairview Dr
Casa Grande Dr
W Sunrise Dr
W Calle Vista Dr
W Montecito Dr
Linde Vista Dr
Via Lindo Dr
W Terra Vista Dr
Raven St
Sierra Ave
N Mango Ave
N Alder Ave
N Almond Dr
N Riverside Ave
Lytle Creek Wash
Cambria Park
Cambria Ave
Farwell St
Walnut Village
W Walnut Ave
Cerritos St
Locust Ave
Laurel Ave
Alder Ave
Kaiser Ave
Palmetto Ave
Blanchard Ave
Acacia Ave
Mango Ave
S Highland Ave
1720 ft
1600 ft
FIGURE 3A
USFWS Plants and Wildlife
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
Base Map: Esri Topographic Map
Source: USFWS


San Bernardino kangaroo rat
Parry's spineflower
Plummer's mariposa-lily
coastal California gnatcatcher
Parish's desert-thorn
singlewhorl burrobrush
Southern California legless lizard
northwestern San Diego pocket mouse
Grotch's bumble bee
American bumble bee
Delhi Sands flower-loving fly
Project Boundary
Offsite Improvement Area
1-mile Buffer
CNDDB Plant Species Locations
CNDDB Wildlife Species Locations
FIGURE 3B
CNDDB Plants and Wildlife
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
Base Map: Esri Topographic Map
Source: CDFW


Casa Grande Dr
N Riverside Ave
N Alder Ave
Lowell St
W Summit Ave
W Persimmon St
Mango Ave
N Locust Ave
N Linden Ave
Stonehurst Dr
W Bohnert Ave
Alder Ave
W Casmalia St
210
Project Boundary
Offsite Improvement Area
National Hydrography Dataset (NHD)
Stream/River
Lake/Pond
Reservoir
National Wetlands Inventory (NWI)
Riverine
Freshwater Pond
Soils
Psamments, Fluvents and Frequently flooded soils
Soboba gravelly loamy sand, 0 to 9 percent slopes
Soboba stony loamy sand, 2 to 9 percent slopes
Tujunga gravelly loamy sand, 0 to 9 percent slopes
Tujunga loamy sand, 0 to 5 percent slopes
FIGURE 4
Soils, National Hydrology Dataset, and National Wetland Inventory
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Source: USFWS; USGS; USDA
Aerial Photo: USDA NAIP 2022



* The observed erosional channels are not anticipated to be jurisdictional per the Corps, RWQCB, and CDFW based on constraints-level analysis. Formal aquatic resources delineation, including additional data collection and associated aquatic resources delineation report (ARDR) would be needed to receive agency confirmation regarding jurisdictional status.
** Number indicates approximate individuals at each occurrence.

FIGURE 5

Proposed Project Impacts

LOCUST GATEWAY

ROCKS BIOLOGICAL CONSULTING

0 125 250 FEET

N

Aerial Photo:USDA NAIP 2022

APPENDIX A

SITE PHOTOGRAPHS

Appendix A
Site Photographs



Photo 1. View of disturbed Riversidean sage scrub from the northern edge of the project site, facing south. January 7, 2025.



Photo 2. View of developed land in the project buffer (left) and disturbed Riversidean sage scrub in the project area (right) from the northern project boundary, facing east. January 07, 2025.



Photo 3. View of disturbed habitat dominated by shortpod mustard (*Hirschfeldia incana*) from northeastern project boundary, facing west. January 16, 2025.



Photo 4. View of dense Riversidean sage scrub dominated by California buckwheat *(Eriogonum fasciculatum*) in the northeastern portion of the project site. October 29, 2024.



Photo 5. View of eastern project buffer across N Locust Avenue, facing east. January 16, 2025.



Photo 6. View of a detention basin found in the northeastern project buffer across N Locust Avenue, facing southwest. October 29, 2024.



Photo 7. View of suitable low and open burrowing owl (*Athene cunicularia*) habitat in the northeastern project buffer across N Locust Avenue, facing east. November 26, 2024.



Photo 8. View of developed land in northwestern project buffer. January 7, 2025.



Photo 9. View of chaparral habitat in the central portion of the project site, facing south. October 29, 2024.



Photo 10. View of dense chaparral habitat found in the south-central portion of the site, facing southwest. October 29, 2024



Photo 11. View of an erosional channel (foreground) found in the south-central area of the site adjacent to developed habitat (background), facing northeast. October 29, 2024.



Photo 12. View of southwestern site boundary with Riversidean sage scrub (left) and disturbed habitat (right), facing north. October 29, 2024.



Photo 13. View of disturbed Riversidean sage scrub habitat (foreground) in the southern project area with developed concrete plant (background) in the western project buffer, facing west. January 16, 2024.



Photo 14. View of an open, developed area south of the chaparral habitat in the central portion of the site, facing south. November 26, 2024.



Photo 15. View of the southern buffer of the project site with patches of disturbed Riversidean sage scrub and ornamental pine trees, facing south. October 29, 2024.



Photo 16. View of developed land south of the offsite improvements, facing east. October 29, 2024.

APPENDIX B

PLANT AND WILDLIFE SPECIES OBSERVED

Appendix B
Plant and Wildlife Species Observed

Family	Scientific Name	Common Name
Plants		
Anacardiaceae	*Rhus aromatica*	Fragrant sumac
Apocynaceae	*Nerium oleander*	Oleander*
Arecaceae	*Washingtonia robusta*	Mexican fan palm*
Asteraceae	*Ambrosia confertiflora*	Weak leaved burweed
Asteraceae	*Ambrosia psilostachya*	Western ragweed
Asteraceae	*Artemisia californica*	California sagebrush
Asteraceae	*Baccharis salicifolia*	Mule fat
Asteraceae	*Centaurea melitensis*	Tocalote*
Asteraceae	*Dittrichia graveolens*	Stinkwort*
Asteraceae	*Encelia californica*	Bush sunflower
Asteraceae	*Encelia farinosa*	Brittlebush
Asteraceae	*Ericameria linearifolia*	Interior goldenbush
Asteraceae	*Ericameria nauseosa*	Rubber rabbitbrush
Asteraceae	*Gutierrezia californica*	California matchweed
Asteraceae	*Hedypnois rhagadioloides*	Crete weed*
Asteraceae	*Helianthus annuus*	Common sunflower
Asteraceae	*Heterotheca grandiflora*	Telegraphweed
Asteraceae	*Lasthenia coronaria*	Royal goldfields
Asteraceae	*Logfia arizonica*	Arizona cottonrose
Asteraceae	*Logfia gallica*	Narrowleaf cottonrose*
Asteraceae	*Oncosiphon pilulifer*	Stinknet*
Asteraceae	*Senecio flaccidus*	Shrubby ragwort
Asteraceae	*Sonchus asper*	Prickly sow-thistle*
Asteraceae	*Sonchus oleraceus*	Common sow-thistle*
Asteraceae	*Tetradymia comosa*	Cotton thorn
Asteraceae	*Uropappus lindleyi*	Silver puffs
Asteraceae	*Verbesina encelioides*	Golden crownbeard*

Family	Scientific Name	Common Name
Boraginaceae	*Amsinckia menziesii*	Small flowered fiddleneck
Boraginaceae	*Cryptantha intermedia*	Common cryptantha
Boraginaceae	*Eucrypta chrysanthemifolia*	Common eucrypta
Boraginaceae	*Heliotropium curassavicum*	Salt heliotrope
Boraginaceae	*Pectocarya linearis*	Sagebrush combseed
Boraginaceae	*Phacelia distans*	Common phacelia
Brassicaceae	*Brassica tournefortii*	Saharan mustard*
Brassicaceae	*Hirschfeldia incana*	Short pod mustard*
Brassicaceae	*Sisymbrium irio*	London rocket*
Brassicaceae	*Sisymbrium orientale*	Oriental hedge mustard*
Cactaceae	*Cylindropuntia bernardina*	Cane cholla
Cactaceae	*Opuntia basilaris*	Beavertail cactus
Cactaceae	*Opuntia phaeacantha*	Brown spined prickly pear
Cactaceae	*Opuntia vaseyi*	Vasey's prickly pear
Chenopodiaceae	*Chenopodium californicum*	Pigweed
Chenopodiaceae	*Salsola* sp.	Russian thistle*
Crassulaceae	*Crassula campestris*	Heath stonecrop*
Crassulaceae	*Crassula colligata*	Crassula colligate*
Crassulaceae	*Crassula connata*	Pigmy weed
Cucurbitaceae	*Marah macrocarpa*	Wild cucumber
Euphorbiaceae	*Croton californicus*	California croton
Euphorbiaceae	*Croton setiger*	Doveweed
Euphorbiaceae	*Euphorbia peplus*	Pretty spurge*
Euphorbiaceae	*Euphorbia serpens*	Matted spurge*
Euphorbiaceae	*Ricinus communis*	Castor bean*
Euphorbiaceae	*Stillingia linearifolia*	Narrow leaved stillingia
Fabaceae	*Acmispon glaber* var. *brevialatus*	Short-winged deerweed
Fabaceae	*Acmispon micranthus*	Small flowered lotus
Fabaceae	*Melilotus albus*	White sweetclover*

Family	Scientific Name	Common Name
Fabaceae	*Melilotus indicus*	Indian sweetclover*
Geraniaceae	*Erodium cicutarium*	Red stemmed filaree*
Heliotropiaceae	*Heliotropium curassavicum*	Heliotrope
Hydrophyllaceae	*Eucrypta chrysanthemifolia*	Common eucrypta
Lamiaceae	*Marrubium vulgare*	White horehound*
Linaceae	*Salvia columbariae*	Chia sage
Linaceae	*Salvia mellifera*	Black sage
Myrsinaceae	*Lysimachia arvensis*	Scarlet pimpernel*
Onagraceae	*Camissonia hirtella*	Hairy sun cup
Onagraceae	*Camissoniopsis bistorta*	California sun cup
Plantaginaceae	*Penstemon spectabilis*	Showy penstemon
Plantaginaceae	*Veronica persica*	Persian speedwell*
Poaceae	*Avena barbata*	Slender oat*
Poaceae	*Bromus diandrus*	Ripgut brime*
Poaceae	*Bromus rubens*	Red brome*
Poaceae	*Festuca myuros*	Rattail sixweeks grass*
Poaceae	*Lamarckia aurea*	Goldentop grass*
Poaceae	*Panicum virgatum*	Switchgrass*
Poaceae	*Pennisetum setaceum*	Fountain grass*
Poaceae	*Schismus* sp.	Schismus*
Polemoniaceae	*Eriastrum sapphirinum*	Saphire woolly-star
Polemoniaceae	*Navarretia hamata* ssp. *hamata*	Hooked navarretia
Polygonaceae	*Chorizanthe parryi* var. *parryi*	Parry's spineflower†
Polygonaceae	*Eriogonum fasciculatum* ssp. *foliolosum*	Inland California buckwheat
Polygonaceae	*Eriogonum gracile*	Slender buckwheat
Polygonaceae	*Pterostegia drymarioides*	Fairy mist
Primulaceae	*Lysimachia arvensis*	Scarlet pimpernel*
Ranunculaceae	*Clematis pauciflora*	Few flowered clematis
Ranunculaceae	*Delphinium cardinale*	Cardinal larkspur

Family	Scientific Name	Common Name
Rhamnaceae	*Ceanothus cuneatus*	Buck brush
Rhamnaceae	*Rhamnus crocea*	Spiny redberry
Rosaceae	*Adenostoma fasciculatum*	Chamise
Rosaceae	*Prunus ilicifolia*	Holly-leaf cherry
Rosaceae	*Rhamnus crocea*	Spiny redberry
Solanaceae	*Datura wrightii*	Jimsonweed
Solanaceae	*Nicotiana glauca*	Tree tobacco*
Solanaceae	*Solanum umbelliferum* var. *xanti*	Purple nightshade
Tamaricaceae	*Tamarix* sp.	Tamarisk*
Urticaceae	*Urtica urens*	Dwarf nettle*
Zygophyllaceae	*Tribulus terrestris*	Puncture vine*
Invertebrates		
Acrididae	N/A	Locust
Andrenidae	*Andrena* sp.	Mining bee species
Anisoptera (suborder)	N/A	Dragonfly
Apidae	*Apis mellifera*	European honeybee*
Apidae	*Apis* sp.	*Apis* species
Apidae	*Bombus californicus*	California bumble bee
Apidae	*Bombus crotchii*	Crotch's bumble bee (CSE)
Apidae	*Bombus* sp.	Bumble bee species
Apidae	*Centris* sp.	Digger bee species
Apidae	*Osmia* sp.	Mason bee species
Asilidae	N/A	Robber fly
Bombyliidae	N/A	Bee fly
Coccinellidae	*Coccinella californica*	California ladybird beetle
Coccinellidae	*Coccinella septempunctata*	Seven-spot ladybird beetle*
Dermaptera (order)	N/A	Earwig*
Formicidae	*Pogonomyrmex barbatus*	Red harvester ant
Hesperiidae	*Hylephila phyleus*	Fiery skipper

Family	Scientific Name	Common Name
Lycaenidae	*Euphilotes bernardino*	Bernardino blue
Meloidae	*Lytta auriculata*	Red-eared blister beetle
Nymphalidae	*Vanessa cardui*	Painted lady butterfly
Papillonodea	*Nymphalis antiopa*	Mourning cloak
Pieridae	*Pieris rapae*	Cabbage white butterfly*
Pieridae	*Pontia protidice*	Checkered white butterfly
Reduviidae	N/A	Assassin bug
Riodinidae	*Apodemia mormo*	Mormon metalmark
Riodinidae	*Apodemia virgulti*	Behr's metalmark
Saturniidae	*Hemileuca electra*	Electra buckmoth
Scarabaeidae	*Paracotalpa ursina*	Little bear beetle
Scoliidae	N/A	Scoliid wasp
Tenebrionidae	*Eleodes* sp.	Darkling beetle species
Thomisidae	N/A	Crab spider
Vespidae	*Polistes* sp.	Paper wasp species
Zygoptera (suborder)	N/A	Damsel fly
Reptiles		
Colubridae	*Coluber constrictor mormon*	Western yellow-bellied racer
Colubridae	*Masticophis flagellum piceus*	Red racer
Phrynosomatidae	*Uta stansburiana elegans*	Western side-blotched lizard
Teiidae	*Aspidoscelis tigris stejnegeri*	Coastal whiptail (SSC)
Birds		
Accipitridae	*Accipiter cooperii*	Cooper's hawk (WL)
Accipitridae	*Buteo jamaicensis*	Red-tailed hawk
Aegithalidae	*Psaltriparus minimus*	Bushtit
Caprimulgidae	*Chordeiles acutipennis*	Lesser nighthawk
Columbidae	*Columba livia*	Rock pigeon*
Columbidae	*Streptopelia decaocto*	Eurasian collared-dove*
Columbidae	*Zenaida macroura*	Mourning dove
Corvidae	*Aphelocoma californica*	California scrub-jay

Family	Scientific Name	Common Name
Corvidae	*Corvus brachyrhynchos*	American crow
Corvidae	*Corvus corax*	Common raven
Falconidae	*Falco sparverius*	American kestrel
Fringillidae	*Haemorhous mexicanus*	House finch
Fringillidae	*Spinus lawrencei*	Lawrence's goldfinch (BCC)
Fringillidae	*Spinus psaltria*	Lesser goldfinch
Hirundinidae	*Hirundo rustica*	Barn swallow
Hirundinidae	*Petrochelidon pyrrhonota*	Cliff swallow
Hirundinidae	*Stelgidopteryx serripennis*	Northern rough-winged swallow
Icteridae	*Sturnella neglecta*	Western meadowlark
Odontophoridae	*Callipepla californica*	California quail
Parulidae	*Setophaga coronata*	Yellow-rumped warbler
Passerellidae	*Melozone crissalis*	California towhee
Passerellidae	*Passerculus sandwichensis*	Savannah sparrow
Passerellidae	*Zonotrichia leucophrys*	White-crowned sparrow
Polioptilidae	*Polioptila caerulea*	Blue-gray gnatcatcher
Strigidae	*Bubo virginianus*	Great-horned owl
Sturnidae	*Sturnus vulgaris*	European starling*
Trochilidae	*Calypte anna*	Anna's hummingbird
Trochilidae	*Calypte costae*	Costa's hummingbird (BCC)
Troglodytidae	*Salpinctes obsoletus*	Rock wren
Troglodytidae	*Thryomanes bewickii*	Bewick's wren
Troglodytidae	*Troglodytes aedon*	House wren
Turdidae	*Sialia currucoides*	Mountain bluebird
Tyrannidae	*Myiarchus cinerascens*	Ash-throated flycatcher
Tyrannidae	*Sayornis nigricans*	Black phoebe
Tyrannidae	*Sayornis saya*	Say's phoebe
Mammals		
Canidae	*Canis latrans*	Coyote
Leporidae	*Sylvilagus audubonii*	Desert cottontail

Family	Scientific Name	Common Name
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel

*Non-Native Species
†CRPR 1B.1
BCC: USFWS Bird of Conservation Concern
SSC: CDFW Species of Special Concern
WL: CDFW Watch List Species

APPENDIX C

LOCUST GATEWAY DEVELOPMENT PROJECT FOCUSED RARE PLANT SURVEY REPORT

ROCKS
BIOLOGICAL CONSULTING

To: Ms. Dana Privitt, Kimley-Horn

From: Alec Goodman and Jim Rocks, Rocks Biological Consulting

Date: July 25, 2025

Subject: Locust Gateway Development Project – Rare Plant Survey Report

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This memo provides a summary of the rare plant surveys conducted by Rocks Biological Consulting (RBC) for the proposed Locust Gateway Development Project (project). Focused rare plant surveys were conducted May–June 2025 and were positive for Parry's spineflower (*Chorizanthe parryi* var. *parryi*).

PROJECT LOCATION & BACKGROUND

The 44.2-acre project site is located in the City of Rialto, San Bernardino County, California, west of N Locust Ave, south of W Lowell St, east of Lake Padden Ln, and north of various developed lots. The primary project parcel (Assessor Parcel Number 023-919-223) is 39.9 acres, with off-site improvements planned on an additional 4.3 acres adjacent to the site. The project site is composed of disturbed and undisturbed Riversidean sage scrub, chaparral, disturbed land, and developed land. Surrounding land uses include industrial and commercial development.

An initial habitat assessment and general biological survey for the project were conducted on October 29, 2024. Based on the results of the literature review, vegetation mapping, and general biological survey, it was determined that Parry's spineflower had moderate potential to occur on site.

Parry's spineflower is a California Rare Plant Rank 1B.1 species, meaning it is considered rare throughout its range and is seriously threatened in California with over 80% of occurrences threatened. This annual herb typically occurs in coastal sage scrub and chaparral habitats in sandy loam soils at an elevation between 260 and 2,635 feet above sea level. Parry's spineflower is distinguished from the closely related San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) by having hooked (instead of straight) involucre awns and a distribution restricted to the Los Angeles basin. Both species generally bloom between April and June[1].

METHODS

In preparation for the rare plant surveys, RBC conducted a desktop analysis of the project site by querying relevant biological resource databases and reviewing current and historic aerial photography. The review included, but was not limited to, the following:

[1] Jepson Flora Project (eds.). 2025. Jepson eFlora. Retrieved July 2025, from https://ucjeps.berkeley.edu/eflora.

- California Department of Fish and Wildlife (CDFW) Natural Diversity Database[2]
- U.S. Fish and Wildlife Service (USFWS) Special-Status Species and Critical Habitat Database[3]
- USFWS Information for Planning and Consultation (IPaC) database[4]
- The California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California Electronic Inventory[5]
- Natural Resources Conservation Service (NRCS) soils data[6]
- Google Earth Pro Imagery[7]
- Jepson Flora Project[8]

Rare plant surveys were conducted within the project site and a 50-foot buffer (survey area; Figure 2) on May 8, May 22, and June 18, 2025, by principal biologist Jim Rocks and senior biologist Alec Goodman. Both surveyors have extensive experience identifying special-status plant species throughout southern California. Special-status plant surveys were conducted in accordance with *Protocols for Surveying and Evaluating Impacts to Special Status Plant Populations and Natural Communities*[9].

Surveys were conducted during the appropriate blooming periods for the primary target species, Parry's spineflower. Biologists walked transects throughout the survey area with a focus on suitable soils and habitat for special-status plants. Special-status plant occurrences observed were mapped and all vascular plant species on the site were identified to species, subspecies, or varietal level.

RESULTS & CONCLUSION

Several occurrences of Parry's spineflower, totaling approximately 1,172 individuals, were documented in the southwestern portion of the project site. Parry's spineflower was found primarily within chaparral habitat in open shallow basins that support California matchweed (*Gutierrezia californica*), royal goldfields (*Lasthenia coronaria*), slender buckwheat (*Eriogonum gracile*), California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), hollyleaf cherry (*Prunus illicifolia*), and short-

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[2] CDFW. 2025. California Department of Fish and Game Natural Diversity Database. Retrieved April 7, 2025, from https://wildlife.ca.gov/Data/CNDDB.

[3] USFWS. 2025. Critical Habitat for Threatened and Endangered Species. Retrieved April 7, 2025, from https://fws.maps.arcgis.com/home/webmap/viewer.html.

[4] USFWS. 2025. Information for Planning and Consulting (IPaC). Retrieved April 7, 2025, from https://ipac.ecosphere.fws.gov.

[5] CNPS, Rare Plant Program. 2025. California Native Plant Society Rare Plant Inventory. Retrieved April 7, 2025, from http://www.rareplants.cnps.org.

[6] NRCS Soils. 2025. Retrieved February 19, 2025, from https://websoilsurvey.nrcs.usda.gov.

[7] Google Earth Pro V 7.3.6.9796. 2025. San Diego County, California. 33°07'57.59"N, 117°09'03.55"W, Eye alt 1661 feet. Retrieved April 2025.

[8] Jepson Flora Project (eds.). 2025. Jepson eFlora. Retrieved July 2025, from https://ucjeps.berkeley.edu/eflora.

[9] CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Plant Populations and Natural Communities. Sacramento, CA.

pod mustard (*Hirschfeldia incana*). The species was found on sandy-loam soils often with a thin cryptobiotic crust. Some Parry's spineflower individuals were observed under the canopy of other shrubs including California matchweed.

A total of 79 plant species were observed on site. No other special-status or rare plant species were observed within the project site or immediately adjacent areas during the focused surveys. Site photos are included as Attachment A, and a full list of plant species observed is included as Appendix B.

FIGURES AND ATTACHMENTS

Figure 1. Project Location

Figure 2. Survey Area

Attachment A. Site Photos

Attachment B. Plant Species Observed

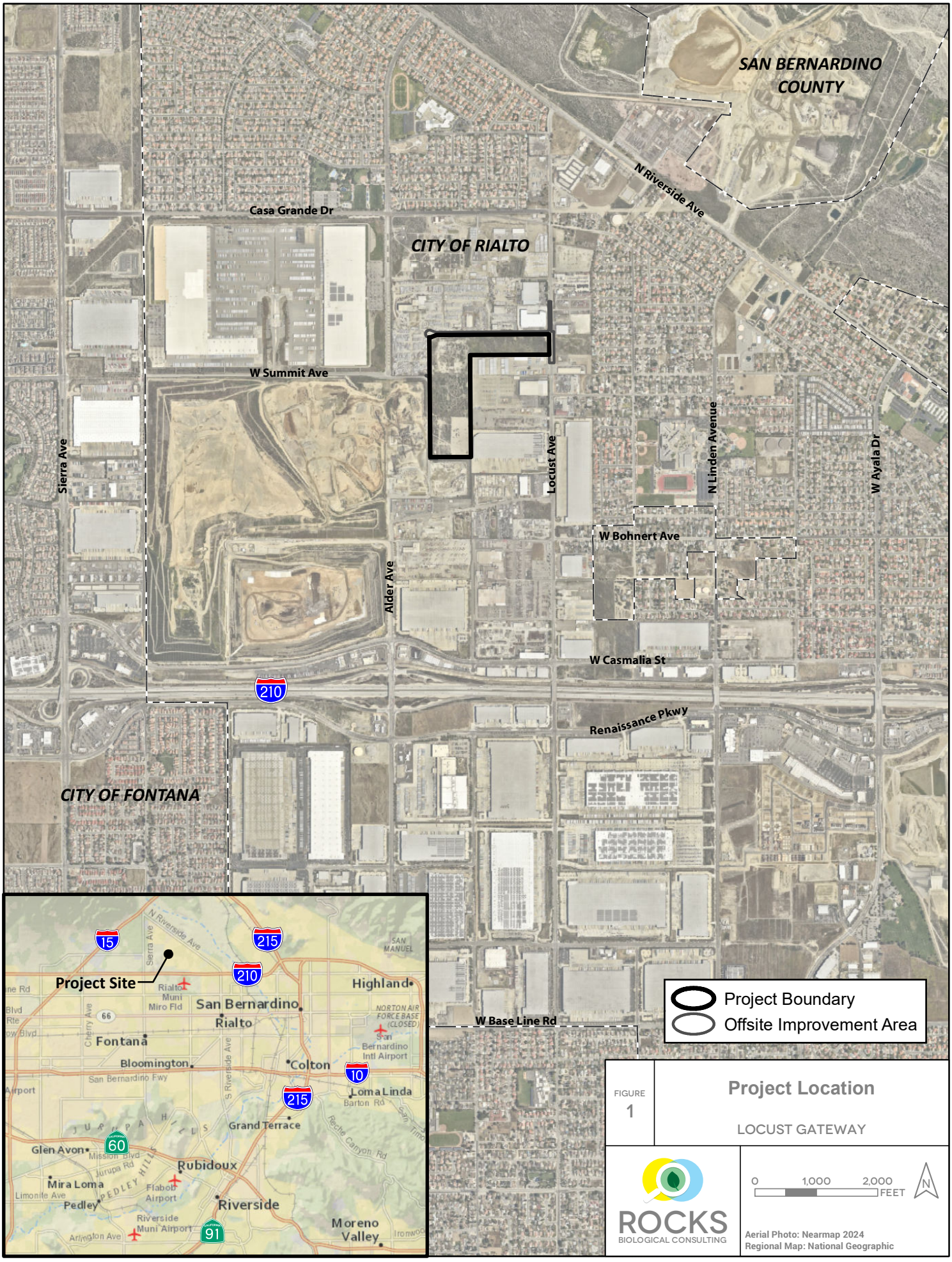


FIGURE 1

Project Location

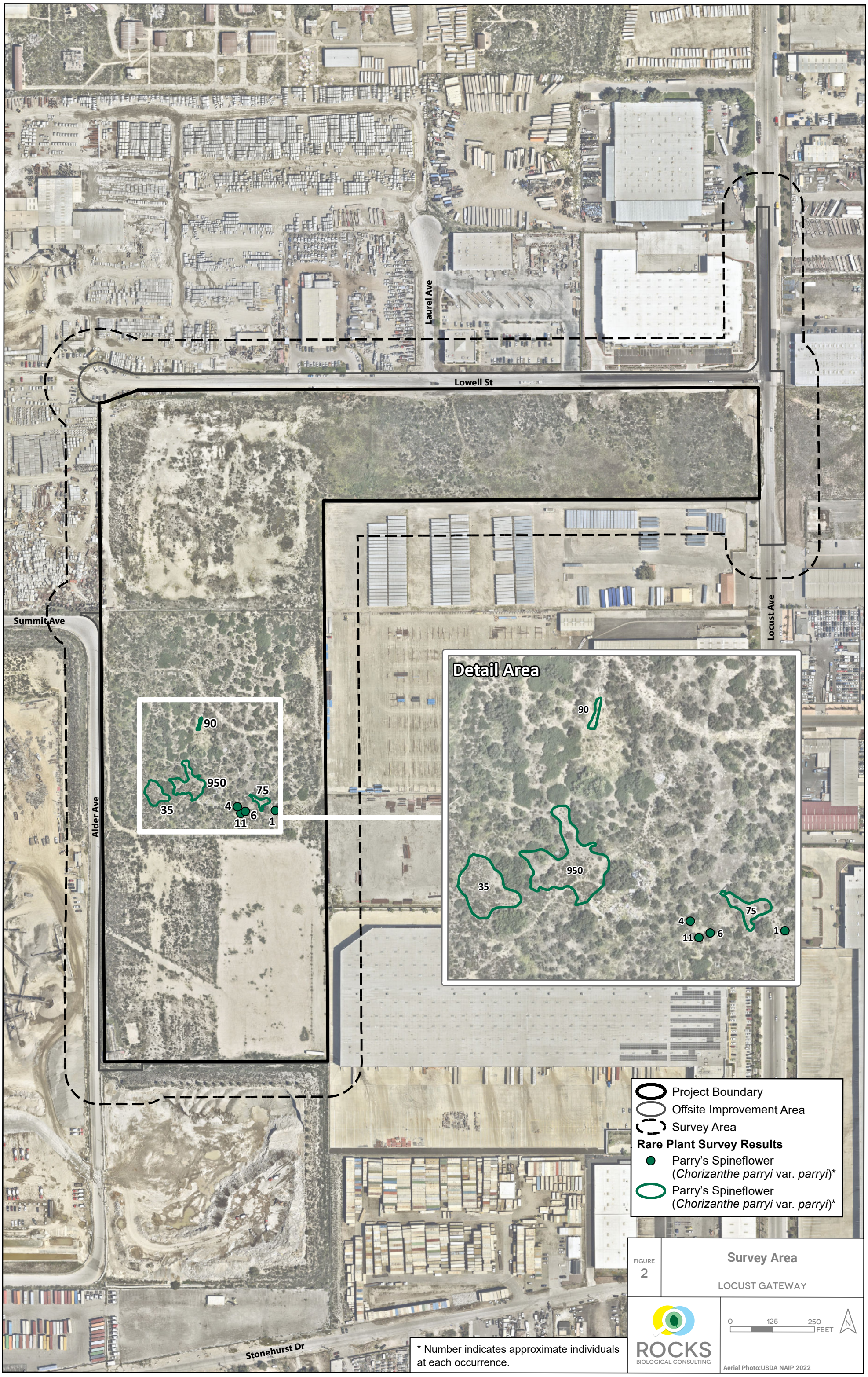
LOCUST GATEWAY

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Aerial Photo: Nearmap 2024
Regional Map: National Geographic


Laurel Ave
Lowell St
Summit Ave
Alder Ave
Locust Ave
Stonehurst Dr
Detail Area
90
950
35
75
4
6
11
1
Project Boundary
Offsite Improvement Area
Survey Area
Rare Plant Survey Results
Parry's Spineflower (Chorizanthe parryi var. parryi)*
Parry's Spineflower (Chorizanthe parryi var. parryi)*
* Number indicates approximate individuals at each occurrence.
FIGURE 2
Survey Area
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 125 250 FEET
N
Aerial Photo:USDA NAIP 2022

Attachment A
Site Photographs



Photo 1. View of chaparral habitat in the central portion of the project site, facing south. Parry's spineflower (*Chorizanthe parryi* var. *parryi*) was found in the vicinity of this photograph, associated with the visible California matchweed (*Gutierrezia* californica), hollyleaf cherry (*Prunus illicifolia*), and short-pod mustard (*Hirschfeldia incana*). May 22, 2025.



Photo 2. View of chaparral habitat in central portion of the project site, facing north. Parry's spineflower was found in the vicinity of this photograph. May 22, 2025.



Photo 3. View of chaparral habitat in in the central portion of the project site, facing northwest. May 22, 2025.



Photo 4. View of Parry's spineflower in habitat, found in openings within chaparral habitat, alive and flowering. May 22, 2025.



Photo 5. View of Parry's spineflower in habitat, found in openings within chaparral habitat, alive and flowering. May 22, 2025.



Photo 6. Magnified view of Parry's spineflower sample under the scope. June 17, 2025.

Attachment B

Plant Species Observed

Family	Scientific Name	Common Name
Anacardiaceae	*Rhus aromatica*	Fragrant sumac
Asteraceae	*Ambrosia confertiflora*	Weak leaved burweed
Asteraceae	*Artemisia californica*	California sagebrush
Asteraceae	*Baccharis salicifolia*	Mule fat
Asteraceae	*Centaurea melitensis*	Tocalote*
Asteraceae	*Dittrichia graveolens*	Stinkwort*
Asteraceae	*Encelia californica*	Bush sunflower
Asteraceae	*Encelia farinosa*	Brittlebush
Asteraceae	*Ericameria linearifolia*	Interior goldenbush
Asteraceae	*Ericameria nauseosa*	Rubber rabbutbrush
Asteraceae	*Gutierrezia californica*	California matchweed
Asteraceae	*Hedypnois rhagadioloides*	Crete weed*
Asteraceae	*Helianthus annuus*	Common sunflower
Asteraceae	*Heterotheca grandiflora*	Telegraphweed
Asteraceae	*Lasthenia coronaria*	Royal goldfields
Asteraceae	*Logfia arizonica*	Arizona cottonrose
Asteraceae	*Logfia gallica*	Narrowleaf cottonrose*
Asteraceae	*Oncosiphon pilulifer*	Srinknet*
Asteraceae	*Senecio flaccidus*	Threadleaf ragwort
Asteraceae	*Sonchus asper*	Spiny sowthistle*
Asteraceae	*Sonchus oleraceus*	Common sowthistle*
Asteraceae	*Tetradymia comosa*	Cotton thorn
Asteraceae	*Uropappus lindleyi*	Silver puffs
Asteraceae	*Verbesina encelioides*	Golden crownbeard*
Boraginaceae	*Amsinckia menziesii*	Small flowered fiddleneck
Boraginaceae	*Cryptantha intermedia*	Common cryptantha
Boraginaceae	*Pectocarya linearis*	Sagebrush combseed
Boraginaceae	*Phacelia distans*	Common phacelia

Family	Scientific Name	Common Name
Brassicaceae	*Brassica tournefortii*	Saharan mustard*
Brassicaceae	*Hirschfeldia incana*	Short-pod mustard*
Brassicaceae	*Sisymbrium irio*	London rocket*
Brassicaceae	*Sisymbrium orientale*	Oriental hedge mustard*
Cactaceae	*Cylindropuntia bernardina*	Cane cholla
Cactaceae	*Opuntia phaeacantha*	Brown spined prickly pear
Chenopodiaceae	*Chenopodium californicum*	Pigweed
Crassulaceae	*Crassula campestris*	Tillaea campestris*
Crassulaceae	*Crassula colligata*	Crassula colligata *
Crassulaceae	*Crassula connata*	Pigmy weed
Cucurbitaceae	*Marah macrocarpa*	Wild cucumber
Euphorbiaceae	*Croton californicus*	California croton
Euphorbiaceae	*Croton setiger*	Turkey-mullein
Euphorbiaceae	*Euphorbia peplus*	Pretty spurge*
Euphorbiaceae	*Euphorbia serpens*	Matted sandmat*
Euphorbiaceae	*Ricinus communis*	Castorbean*
Euphorbiaceae	*Stillingia linearifolia*	Narrow leaved stillingia
Fabaceae	*Acmispon glaber* var. *brevialatus*	Short winged deerweed
Fabaceae	*Acmispon micranthus*	Small flowered lotus
Fabaceae	*Melilotus albus*	White sweetclover*
Fabaceae	*Melilotus indicus*	Sourclover*
Geraniaceae	*Erodium cicutarium*	Red stemmed filaree*
Heliotropiaceae	*Heliotropium curassavicum*	Heliotrope
Hydrophyllaceae	*Eucrypta chrysanthemifolia*	Common eucrypta
Lamiaceae	*Marrubium vulgare*	White horehound*
Lamiaceae	*Salvia columbariae*	Chia sage
Lamiaceae	*Salvia mellifera*	Black sage
Myrsinaceae	*Lysimachia arvensis*	Scarlet pimpernel*
Onagraceae	*Camissoniopsis bistorta*	California sun cup

Family	Scientific Name	Common Name
Onagraceae	*Camissoniopsis hirtella*	Hairy sun cup
Plantaginaceae	*Penstemon spectabilis*	Showy penstemon
Plantaginaceae	*Veronica persica*	Plantaginaceae*
Poaceae	*Avena barbata*	Slender oat*
Poaceae	*Bromus diandrus*	Ripgut brome*
Poaceae	*Bromus rubens*	Red brome*
Poaceae	*Festuca myuros*	Rattail sixweeks grass*
Poaceae	*Lamarckia aurea*	Goldentop grass*
Polemoniaceae	*Navarretia hamata ssp. hamata*	Hooked navarretia
Polygonaceae	*Chorizanthe parryi* var. *parryi*	Parry's spineflower[1]
Polygonaceae	*Eriogonum fasciculatum* var. *foliolosum*	California buckwheat
Polygonaceae	*Eriogonum gracile*	Slender buckwheat
Polygonaceae	*Pterostegia drymarioides*	Fairy mist
Ranunculaceae	*Clematis pauciflora*	Few flowered clematis
Ranunculaceae	*Delphinium cardinale*	Scarlet larkspur
Rhamnaceae	*Ceanothus cuneatus*	Buck brush
Rhamnaceae	*Rhamnus crocea*	Spiny redberry
Rosaceae	*Adenostoma fasciculatum*	Chamise
Solanaceae	*Datura wrightii*	Jimsonweed
Solanaceae	*Nicotiana glauca*	Tree tobacco*
Solanaceae	*Solanum umbelliferum* var. *xanti*	Purple nightshade
Urticaceae	*Urtica urens*	Dwarf nettle*

*Non-Native Species

[1]California Rare Plant Rank (CRPR) 1B.1

APPENDIX D

LOCUST GATEWAY DEVELOPMENT PROJECT PROTOCOL PRESENCE/ABSENCE NON-BREEDING SEASON SURVEY REPORT FOR BURROWING OWL (*ATHENE CUNICULARIA*)

ROCKS
BIOLOGICAL CONSULTING





LOCUST GATEWAY DEVELOPMENT PROJECT

PROTOCOL PRESENCE/ABSENCE NON-BREEDING SURVEY REPORT FOR BURROWING OWL (*Athene cunicularia*)

San Bernardino County, California

February 4, 2025

Prepared for:
Kimley-Horn and Associates
401 B Street #600
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2 Introduction 1
2.1 Project Location 1
2.2 Burrowing Owl Natural History 1
3 Methods 2
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Figure 1. Survey Results

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Appendix A – Site Photographs
Appendix B – Surveyor Field Notes
Appendix C – Bird Species Observed
Appendix D – California Natural Diversity Database Online Field Survey Form Report

1 SUMMARY

This report is a summary of the focused non-breeding season burrowing owl (*Athene cunicularia*; BUOW) surveys conducted by Rocks Biological Consulting (RBC) for the Locust Gateway Development Project (project) located in the City of Rialto (City), San Bernardino County, California. Focused BUOW surveys were conducted on the project site and a 500-foot (150-meter) buffer by qualified biologists between October 29, 2024, and January 31, 2025, following survey guidelines outlined in the California Department of Fish and Wildlife (CDFW) *Staff Report on Burrowing Owl Mitigation* (BUOW Guidelines; CDFW 2012). No BUOW or sign were observed during these focused survey efforts.

2 INTRODUCTION

2.1 PROJECT LOCATION

The project consists of approximately 44.2 acres in San Bernardino County within the Devore U.S. Geological Survey (USGS) 7.5' quadrangle (USGS 2025), approximately 0.5 mile north of State Route 210 and three miles south of Interstate 15 (figure 1). The site is bounded by West Lowell Street to the north, Bohnert Avenue to the south, North Locust Avenue to the east, and North Alder Avenue to the west.

2.2 BURROWING OWL NATURAL HISTORY

On October 10, 2024, the California Fish and Game Commission (CFGC) unanimously approved the listing of burrowing owl as a candidate species for listing under the California Endangered Species Act (CESA). The species will undergo a one-year review prior to issuance of a final decision on listing. As a candidate for potential listing, the species is temporarily awarded the same protections as a state-listed endangered or threatened species (CFGC 2024).

In California, suitable habitat for BUOW is generally characterized by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils, such as naturally occurring grassland, shrub steppe, and desert habitats (Haug et al. 1993). In addition, BUOW may also occur in agricultural areas, ruderal grassy fields, vacant lots, and pastures containing suitable vegetation structure and useable burrows with foraging habitat in proximity (Gervais et al. 2008). Typically, BUOW use burrows dug by California ground squirrel (*Otospermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*) and dens or holes dug by other fossorial species, including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox [*Vulpes macrotis mutica*]; Ronan 2002). Additionally, BUOW frequently use natural rock cavities, debris piles, culverts, and pipes for nesting and roosting (Rosenberg et al. 1998) and have been documented using artificial burrows for nesting and cover (Smith and Belthoff 2001). Occupancy of BUOW habitat is confirmed at a site when at least one BUOW or its sign at or near a burrow entrance is observed within the last three years (Rich 1984).

3 METHODS

Focused BUOW surveys were conducted by qualified biologists Imran Badar, Alec Goodman, Hannah Swarthout, Melissa Tamarkin, and Kelsey Woldt (RBC biologists) during the species non-breeding season (September 1 – January 31) following survey recommendations outlined in the BUOW Guidelines. Alec Goodman is a senior biologist and has over nine years of experience in environmental consulting with a focus in Mojave Desert biology. Associate biologists Kelsey Woldt and Hannah Swarthout have five and four years of environmental consulting experience, respectively. Imran Badar and Melissa Tamarkin are staff biologists with approximately one year of professional experience. Collectively, RBC surveyors have extensive experience surveying for BUOW and associated sign and are familiar with BUOW natural history and identification.

Surveys were conducted between morning civil twilight and 10:00 a.m. to the greatest extent possible. Four surveys were conducted during high visibility weather conditions that were suitable for detecting BUOW. These surveys were not performed during rain, dense fog, or when high winds were greater than 20 miles per hour (MPH).

The BUOW survey area consisted of the approximately 44.2-acre project site plus a surrounding 500-foot buffer (Figure 1). Surveys were conducted by walking transects spaced approximately 20 meters apart throughout all suitable BUOW habitat within the survey area. At the beginning of each transect, and approximately every 100 meters, RBC biologists used binoculars (10x42) to scan the survey area for BUOW, active and potential burrows, and/or sign of BUOW. All observed burrows suitable for BUOW occupation were examined for sign, including feathers, pellets, prey remains, whitewash, and/or decoration at or near burrow entrances. Burrows were considered active if a BUOW is observed at or near the entrance or if evidence of recent sign is present. All observations of BUOW, BUOW sign, and/or suitable burrows were recorded using the geographic information system (GIS) program ArcGIS Field Maps.

4 RESULTS

4.1 EXISTING CONDITIONS

The project site is primarily composed of Riversidean sage scrub, portions of which are disturbed; it also includes smaller areas of chaparral, disturbed land, and developed land. The topography of the project site is generally flat with minimal change in elevation. Portions of the project site are partially fenced, and many areas have been anthropogenically disturbed by ground disturbance, trash dumping, and encampments. Lands immediately surrounding the project site have been substantially impacted and includes developed lands (i.e., roads, commercial and industrial buildings, parking lots), scrap metal and rock piles, a detention basin, berms, and active heavy machinery operations. Overhead electric utilities are located along the northwestern project boundary along North Locust Avenue. Site photographs are provided in Appendix A.

4.2 BURROWING OWL SURVEY RESULTS

RBC biologists conducted focused BUOW surveys between October 29, 2024 and January 31, 2025. Survey dates, times, surveyors, and weather conditions are presented in Table 1, below.

Table 1. Burrowing Owl Survey Dates and Conditions

Survey	Date	Time (Start-End)	Temp (°F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Range (MPH) (Start; End)	Precipitation (%) (Start-End)	Visibility (Low, Med, High) (Start-End)	Surveyors
1	10/29/2024	0730-1100	49-64	25-50	3-5; 3-5	0-0	High-High	AG, HS
2	11/26/2024	0700-0900	51-55	95-95	0-2; 0-2	0-0	High-High	HS, KW
3A	1/07/2025	0730-0930	51-54	100-90	15-25; 10-15	5-0	High-High	AG, MT
3B	1/16/2025	0715-0915	54-65	0-0	5-8; 3-5	0-0	High-High	AG, KW
4	01/31/2025	0750-0940	41-52	10-15	0-2; 0-2	0-0	High-High	KW, IB
Surveyors: AG= Alec Goodman, HS= Hannah Swarthout, KW= Kelsey Woldt, MT = Melissa Tamarkin, IB = Imran Badar								

No BUOW or sign were observed during any of the focused survey efforts. Ten potential burrows suitable for BUOW occupation were observed; however, no sign was detected (Figure 1). Portions of Survey 3A on January 7, 2024 may have been invalid due to wind gusts over 20 MPH; therefore, the full survey was repeated as on January 16, 2024 during ideal weather conditions out of an abundance of caution. All other surveys were conducted during high visibility weather conditions suitable for BUOW detection. Survey 1 extended past 10:00 a.m. but the highly favorable weather conditions made it unlikely to yield false-negative results. Surveyor field notes are included as Appendix B.

Common ravens (*Corvus corax*) were observed within survey areas and are known to predate on BUOW; however, no evidence of BUOW predation was observed. A comprehensive list of bird species observed during the focused non-breeding BUOW surveys is provided in Appendix C.

5 CONCLUSIONS

All focused non-breeding season BUOW surveys conducted for the project were negative. No BUOW or sign were observed within survey area.

Due the presence of suitable habitat, pre-construction take avoidance surveys should be conducted in accordance with the BUOW Guidelines at least 14 days and 24 hours prior to ground disturbing activities.

6 REFERENCES

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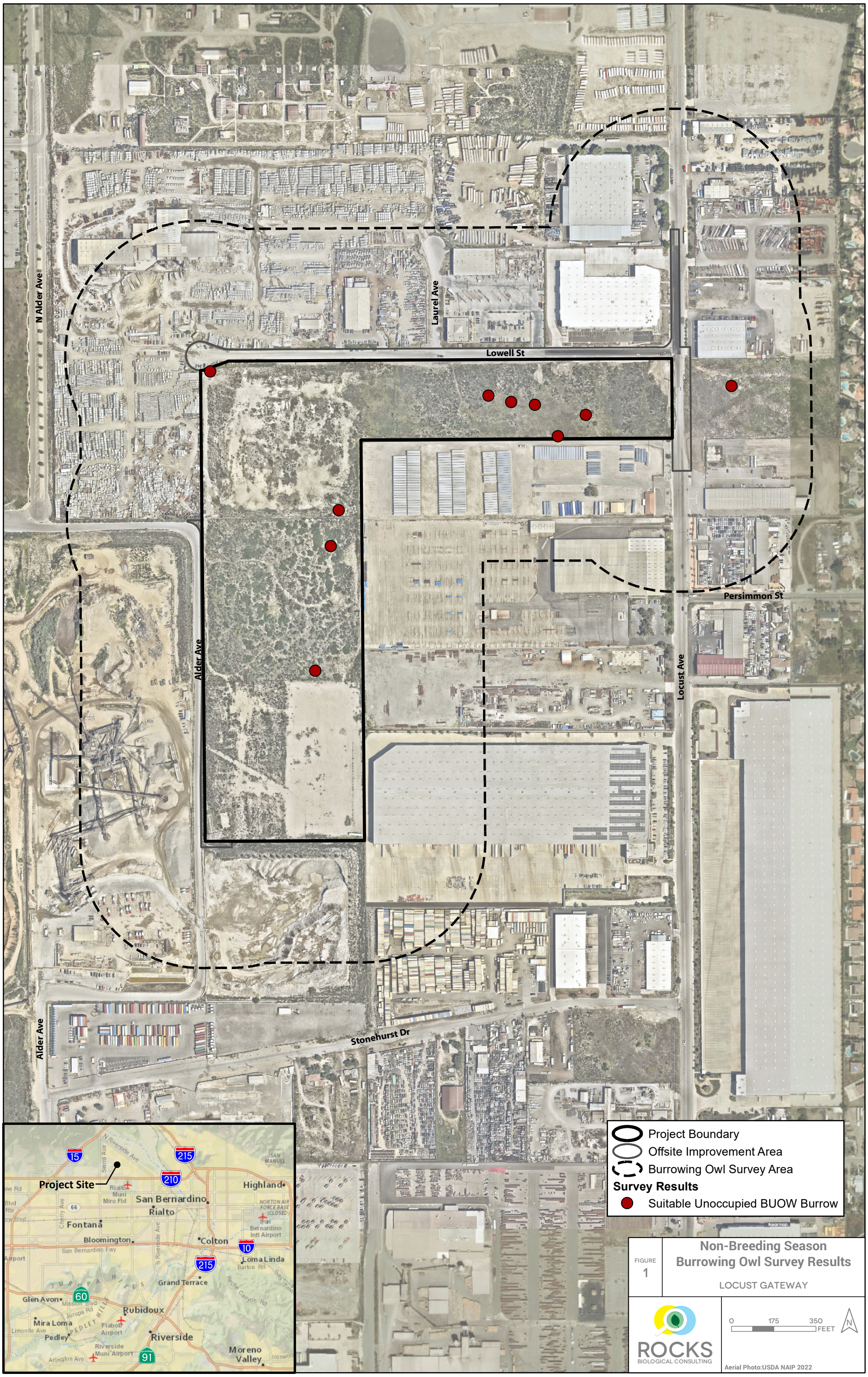
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N Alder Ave
Laurel Ave
Lowell St
Alder Ave
Locust Ave
Persimmon St
Alder Ave
Stonehurst Dr
Project Site
Project Boundary
Offsite Improvement Area
Burrowing Owl Survey Area
Survey Results
Suitable Unoccupied BUOW Burrow
FIGURE 1
Non-Breeding Season Burrowing Owl Survey Results
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 175 350 FEET
N
Aerial Photo:USDA NAIP 2022

APPENDIX A

SITE PHOTOGRAPHS

Appendix A
Site Photographs



Photo 1. Representative view of open disturbed land suitable for BUOW in the eastern portion of the project site, facing southeast. October 29, 2024.



Photo 2. Representative view of open disturbed land suitable for BUOW in the northeastern buffer east of Locust Avenue, facing southeast. November 26, 2024.



Photo 3. Representative view of chaparral habitat near the center of the project site, facing southeast. January 7, 2025.



Photo 4. View of a California ground squirrel burrow suitable for BUOW near the south central portion of the project site, facing southwest. October 29, 2024.



Photo 5. View of pipe in concrete slab suitable for BUOW near the eastern center of the project site, facing southeast. October 29, 2024.



Photo 6. View of developed land from the southeastern border of the project site, facing south. November 26, 2024.



Photo 7. Representative view of disturbed Riversidean sage scrub in the northern portion of the site, facing southeast. January 7, 2025.



Photo 8. View of concrete wall with berm located along the southern portion of the northern extent of the project site, facing southwest. October 29, 2024.

APPENDIX B

SURVEYOR FIELD NOTES

66 Locust Gateway 10/29

AE Non breeding BUOW 4

HS >0730 49 3-5 25%
<1100 54 3-5 50%

HOFI YRWA AMRO WCSP
HOWR LEGO MODO CART
SOSP AMKE EUST CORA
SHUS BGGN
CABS

Habitat: CCS, RW sage scrub
open patches of habitat present,
CABS burrows
- Chaparral, dense, S. central
- Dist/Dev
Dist habitat: HIKING; CENMIX

suitable small mammal burrows

Eastern buffer BUOW suitable

Scale: 1 square = _____

11/26/24 LOCUST GATEWAY BUOW

0700	51°	0-2	95.0°
0900	55°	0-2	95.0°

HS & KW

CATO	MODO	CORA	WCSP
LEGO	HOFI	ROPI	ANHU
WEME	ROWR	AMCR	CASJ
SAPH	RTHA	YRWA	AMKE

Audubon cottontail
Coyote (scat & individual)
CAGS

☆ Eastern buffer near Locust St. = most suitable (low veg height)

Locust BUOW AGMT 01/07/2025

	Time	Temp	CC	Wind	
start	0730	51	100%	15-25	drizzle
End	0930	54	90%	10-15	no rain

NO BUOW or BUOW sign

Birds

WCSP	MODO	ROPI	ROWR	LEGO
ANHU	[redacted]	HOFI	COHA*	
CORA	BGGN	AMCR	MOBL	

Scale: 1 square = _____

Rite in the Rain

VTG Locust Gateway 1/16/25

KW Non breeding BUOW #3 (2)

0715 54 5-8 Qt

0915 56 3-5 Qt

CORA HOFI ROPI DART MODO

ANHU NOMO WCSP LEOO AMKE

BEWR BUOW

Ceanothus sp observation (chaparral.

- Searched sandy habitat, leaf litter, and cover boards for CA legless lizard → Negative.

CAGS, AUCO, Coyote scat

NO BUOW

NO Sign.

Scale: 1 square = _____

IB[76] Locust Gateway Nonbreeding BUOW #4 9/3

KW	750	71°F	0-2	10%
	990	52°F	0-2	5%
THTH		BLPH	AMKE	
LEGO		BGGN	CALT	
ANHU		Coyote	LOWL	
WCSP		SAPH	BEWR	
Audubon		Cottontail		
MODO		CAST		
CORA		RTHA		
CAGS		ROPI		

NO BUOW, Sign, or active burrows

Scale: 1 square = _____

APPENDIX C

BIRD SPECIES OBSERVED

Appendix C

Bird Species Observed

Family	Common Name	Scientific Name
Accipitridae	Cooper's hawk (WL)	*Accipiter cooperii*
Accipitridae	Red-tailed hawk	*Buteo jamaicensis*
Columbidae	Mourning dove	*Zenaida macroura*
Columbidae	Rock pigeon*	*Columba livia*
Corvidae	American crow	*Corvus brachyrhynchos*
Corvidae	California scrub-jay	*Aphelocoma californica*
Corvidae	Common raven	*Corvus corax*
Falconidae	American kestrel	*Falco sparverius*
Fringillidae	House finch	*Haemorhous mexicanus*
Fringillidae	Lesser goldfinch	*Spinus psaltria*
Icteridae	Western meadowlark	*Sturnella neglecta*
Parulidae	Yellow-rumped warbler	*Setophaga coronata*
Passerellidae	California towhee	*Melozone crissalis*
Passerellidae	Savannah sparrow	*Passerculus sandwichensis*
Passerellidae	White-crowned sparrow	*Zonotrichia leucophrys*
Polioptilidae	Blue-gray gnatcatcher	*Polioptila caerulea*
Sturnidae	European starling*	*Sturnus vulgaris*
Trochilidae	Anna's hummingbird	*Calypte anna*
Troglodytidae	Bewick's wren	*Thryomanes bewickii*
Troglodytidae	House wren	*Troglodytes aedon*
Troglodytidae	Rock wren	*Salpinctes obsoletus*
Turdidae	Mountain bluebird	*Sialia currucoides*
Tyrannidae	Black phoebe	*Sayornis nigricans*
Tyrannidae	Say's phoebe	*Sayornis saya*
*Introduced species WL: CDFW Watch List Species		

APPENDIX D

CALIFORNIA NATURAL DIVERSITY DATABASE ONLINE FIELD SURVEY FORM REPORT

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code GOO25F0004
Quad code 3411724
Occ. no.
EO index no.
Map index no.

Scientific name: *Accipiter cooperii*

Common name: Cooper's hawk

Date of field work (mm-dd-yyyy): 01-07-2025

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Alec Goodman

Affiliation:

Address: 4312 Rialto St. , San Diego, CA 92107

Email: info@rocksbio.com

Phone: (619) 701-6798

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Seen

Identification explanation:

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort:

Total number of individuals: 1

Collection? No **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	other
1				

Age class comment:

Bird site use:

☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek

☐ Non-breeding (over-wintering) ☐ Communal roost ☑ Other (foraging, fly-over, etc.)

Site use description: Flushed from site, flew to the north

What was the observed behavior? Flushed

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description:

Slope: Landowner/manager:

Aspect:

Site condition + population viability:

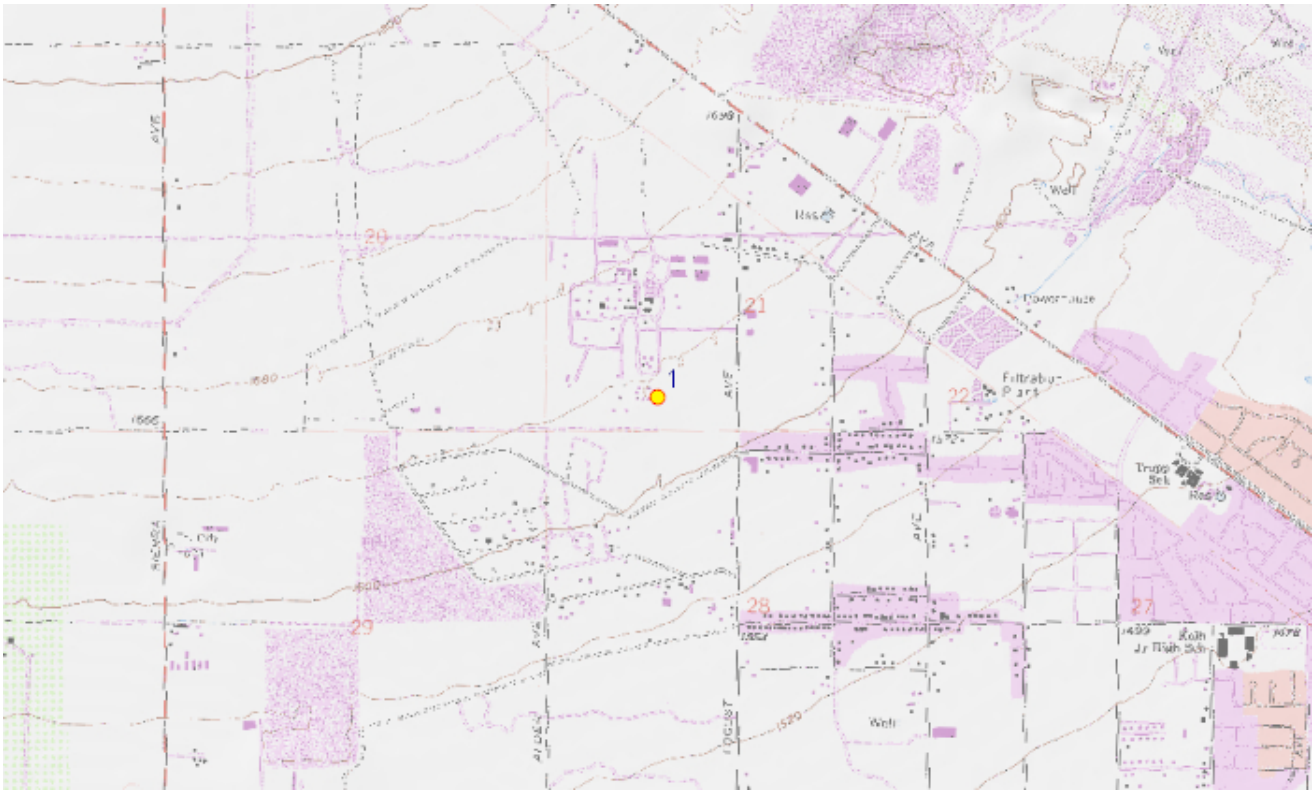
Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Devore	1635	34.15164	-117.41353	461879	3779048	11
1	**Public Land Survey**	**Feature Comment**						
	S T01N R05W 21							

The mapped feature is accurate within: 5 m

Source of mapped feature: ArcGIS Field Maps Mobile Device

APPENDIX E

CROTCH'S BUMBLE BEE SURVEY REPORT FOR THE LOCUST GATEWAY DEVELOPMENT PROJECT

July 30, 2025

California Department of Fish and Wildlife
Attn: Mr. Justin Garcias
Wildlife Branch
P.O. Box 944209
Sacramento, CA 94244

Subject: Crotch's Bumble Bee Survey Report for the Locust Gateway Development Project, City of Rialto, San Bernardino County, California

Mr. Garcias:

This report is a summary of the results of focused surveys for Crotch's bumble bee (*Bombus crotchii*, CBB) that Rocks Biological Consulting (RBC) conducted for the Locust Gateway Development Project (project) in the City of Rialto, San Bernardino County, California. Survey results were positive for CBB. Additionally, seven yellow bumble bees (*Bombus californicus*) and two unidentified *Bombus* individuals were recorded foraging within the project site. No bumble bee (*Bombus*) nests were documented within the project site during focused surveys.

Introduction

The approximately 44.2-acre project site is in the in the City of Rialto (City), San Bernardino County, California. The project site is in the northwestern portion of the City, approximately 0.5 mile north of State Route 210 and three miles south of Interstate 15. The project is bounded by West Lowell Street to the north, West Stonehurst Drive to the south, North Locust Avenue to the east, and North Alder Avenue to the west. The proposed project is the development of an industrial warehouse, office building, and adjacent parking lot. Off-site utility and roadway improvements would occur immediately north of the warehouse lot on Lowell Street and within a portion of Locust Avenue east of the warehouse lot. The project site lies within the Devore U.S. Geological Survey (USGS) 7.5' quadrangle[1], within Sections 21 and 28 of Township 1 North, Range 5 West (Figure 1).

Crotch's Bumble Bee Natural History

CBB has experienced a sharp population decline over the past decade and is a candidate for listing under the California Endangered Species Act (CESA). Historically, CBB occurred from northern California south to Baja Mexico and from the west coast to California's central valley and southwestern desert, with some records as far east as Nevada. However, since the early 2000's, a change in population ecology has been observed; CBB is found in approximately 75% of its historic range and has been extirpated from the northern extent of this range entirely. In addition, the species' persistence within its extant range is estimated to be approximately 20% of its historic

[1] U.S. Geological Survey (USGS). (2025). USGS U.S. Topo 7.5 – minute maps for DEVORE. Retrieved July 1, 2025.

occupancy[2]. Though CBB is relatively tolerant of fragmented and/or semi-urban environments, habitat loss, climate change, and pesticide use are considered imminent threats to populations[3,4].

Suitable habitat for this species includes a variety of open shrub and grassland vegetation communities that support significant stands of nectar sources, mostly in the form of flowering annuals. CBB's primary nectar sources include *Medicago* spp., *Lupinus* spp., *Chaenactis* spp., *Asclepias* spp., *Phacelia* spp., and *Salvia* spp., which have easily accessible nectar that accommodates CBB's relatively short tongue. CBB nest underground, often in abandoned small mammal burrows or similar cavities, and move to a different nest site each year[5].

Methods

RBC biologists conducted a CBB habitat assessment for the project site concurrent with the general biological survey on October 29, 2024. RBC performed vegetation mapping, conducted an inventory of plant species on site, and recorded the presence of small mammal burrows, thatch, and other potential overwintering or nesting refugia. Additionally, RBC queried the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS) for CBB records within a 10-mile radius of the project site[6,7].

RBC biologists Ian Hirschler (principal investigator), Jim Rocks, Alec Goodman, Kelsey Woldt, and Imran Badar conducted focused surveys of all suitable habitat on the project site in accordance with the CDFW's *Survey Considerations for CESA Candidate Bumble Bee Species*[8]. Surveys were performed two to four weeks apart during the Colony Active Period (April – August) when CBB detection is at its peak. Surveys occurred at least an hour after sunrise and at least two hours before sunset, on warm, but not hot, sunny days (65-90 degrees Fahrenheit [F]), with winds of less than eight miles per hour. Surveys were conducted by walking transects through the project site focusing on areas where ample nectar sources were present. During the survey, all observed insects, arachnids, and nectar sources were identified to the lowest taxonomic level possible and recorded in field notebooks.

If a bumble bee was encountered, Mr. Hirschler would carefully capture the specimen using a net. The bumble bee would then be placed it in a sterile vial in a cooler with crushed ice, avoiding temperatures below 25 degrees F. The specimen would be removed from the cooler and vial after approximately 10 minutes or once it appeared anesthetized. Prior to release, photographs would be taken at multiple angles (ventral, dorsal, lateral, anterior, and posterior) to facilitate identification

---

[2] Hatfield, R., S. Jepsen, R. W. Thorp, L. Richardson, and S. Colla. (2015). Crotch bumble bee, *Bombus crotchii*. The IUCN Red List of Threatened Species 2015. Retrieved on August 2024, from https://www.iucnredlist.org/ja/species/44937582/46440211.

[3] California Department of Fish and Wildlife (CDFW). (2022). *California Department of Fish and Wildlife News room*. Retrieved from https://wildlife.ca.gov/News/cdfw-seeks-public-comment-related-to-crotchs-bumble-bee-franklins-bumble-bee-suckleys-cuckoo-bumble-bee-and-western-bumble-bee#gsc.tab=0.

[4]Williams, P., R. W. Thorp, L. Richardson, and S. Colla. 2014. Bumble Bees of North America: An identification guide. Princeton University Press.

[5] Ibid.

[6] CDFW. 2025a. California Department of Fish and Game Natural Diversity Database – Electronic Format. Retrieved May 2025.

[7] CDFW. 2025b. Biogeographic Information and Observation System. Retrieved May 2025, from https://wildlife.ca.gov/Data/BIOS.

[8] CDFW. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Retrieved May 2025, from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

to species. All surveyors were prepared to record the location, associated plant taxa, population size, and nesting status of any observed CBB and to collect non-lethal photo vouchers captured at various angles to confirm accurate identification.

Results

Existing Conditions

The project site is composed of five vegetation communities and land uses, including disturbed and relatively undisturbed Riversidean sage scrub, chamise chaparral, developed land, and disturbed land[9]. The project site supports habitat and nectar sources appropriate for CBB; however, non-native vegetation species (both suitable and non-suitable for CBB nectaring) are dominant throughout much of the site due to heavy site disturbance and surrounding human impacts. Small mammal burrows throughout the project site offer low-to-moderate nesting and overwintering potential. Two CBB occurrences were recorded in 2024 approximately two miles north of the project site near Lytle Creek Wash and the nearby community, Sierra Heights[10,11]. Based on the results of the habitat assessment, including the potential availability and diversity of nectar sources and the CBB records in the vicinity of the project site, the potential for CBB to occur on the project site was considered low-to-moderate.

Riversidean sage scrub and chaparral habitat within the project site supported a variety of native plants, ample nectar sources, and potential nesting and/or overwintering resources. Disturbed areas in the northern portion of the project site were dominated by short-pod mustard (*Hirschfeldia incana*), common fiddleneck (*Amsinckia menziesii*), and common phacelia (*Phacelia distans*), but a variety nectar sources and nesting resources suitable for CBB were still present within these portions of the project site during the focused surveys.

During the focused surveys, suitable CBB habitat on site was dominated by California buckwheat (*Eriogonum fasciculatum*), short-pod mustard, and deerweed (*Acmispon glaber*). Nectar availability on site varied during each survey as flowering plants on site senesced throughout the survey period (April 29 through June 9, 2025). Representative site photographs are presented in Attachment A.

Many of the plants present throughout the site are potential nectar sources for CBB, such as California buckwheat, common fiddleneck, short-pod mustard, black sage (*Salvia mellifera*), chamise (*Adenostoma fasciculatum*), and showy penstemon (*Penstemon spectabilis*). A list of observed nectar sources is presented in Attachment B.

Precipitation Data

Table 1 below describes the estimated monthly total precipitation for the project site from July 2024 through June 2025 from the NRCS database for the San Bernardino 5.1 NW station[12].

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[9] Holland, R. F. (1986). Preliminary descriptions of the terrestrial natural communities of California. State of California, the Resources Agency, Dept. of Fish and Game.

[10] CDFW. 2025a. California Department of Fish and Game Natural Diversity Database – Electronic Format. Retrieved June 2025.

[11] CDFW. 2025b. Biogeographic Information and Observation System. Retrieved June 2025, from https://wildlife.ca.gov/Data/BIOS.

[12] NRCS. 2025. AgACIS for San Bernardino County. Monthly Total Precipitation for San Bernardino 5.1 NW, CA. Accessed June 18, 2025.

The average annual precipitation for the City of Rialto over the last ten years is 23 inches [13]. From April 2024 to the start of protocol CBB surveys in April 2025, the project site received 19 inches of rain. Reduced precipitation rates during the 12 months prior to CBB surveys contributed to a decrease in nectar availability within the project site in terms of both the density and duration of flowering plants.

Table 1. Monthly Precipitation Data (Inches) for 2024 through June 2025

July 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	June 2025	Total Rainfall
T	0.00	0.03	0.18	1.53	0.07	1.14	7.96	4.58	0.67	1.35	M	17.51
T indicates trace amounts. Trace amounts are treated as zero in sums, means, and frequency counts. M indicates missing data.												

Focused Surveys

RBC conducted three focused CBB surveys during the Colony Active Period between April 29 and June 9, 2025. Survey dates, conditions, and personnel are presented in Table 2, below.

Table 2. Crotch's Bumble Bee Survey Dates/Conditions

Survey Round	Date	Surveyor(s)	Time (Start-End)	Temperature (F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Speed (mph) (Start; End)
1	4/29/25	IH, KW	1030-1430	65-76	0-20	0–2; 4–8
2	5/22/25	IH, JR, AG	1045-1430	81-87	10-5	0–3; 3–7
3	6/09/25	IH, IB	0945-1345	67-80	50-20	3–6; 1–4
Surveyors: AG=Alec Goodman; IH=Ian Hirschler; IB=Imran Badar; JR=Jim Rocks; KW=Kelsey Woldt						

RBC observed CBB, yellow bumble bee, and unidentified *Bombus* species within the project site. During the first survey on April 29, 2025, Mr. Hirschler captured and identified one yellow bumble bee after it was observed nectaring on showy penstemon. On May 22, 2025, one unidentified *Bombus* individual was observed in addition to one yellow bumble bee, which was captured and identified by Mr. Hirschler while nectaring on showy penstemon. The final survey on June 9, 2025, found one CBB resting on California buckwheat in Riversidean sage scrub in the northern portion of the project site. This CBB individual, as well as five yellow bumble bees, were captured and identified by Mr. Hirschler. One unidentified *Bombus* individual was observed nectaring on black sage (*Salvia mellifera*) but was not captured or identified to species. In total, one CBB, seven yellow bumble bees, and two unidentified *Bombus* individuals were observed during focused CBB surveys. Photos of all captured *Bombus* individuals are included in Attachment C.

No bumble bee nests were observed during the focused surveys. A list of invertebrate species observed is presented as Attachment D, and surveyor field notes are provided in Attachment E.

[13] NRCS. 2025. AgACIS for San Bernardino County. Monthly Total Precipitation for San Bernardino 5.1 NW, CA. Accessed June 18, 2025.

Surveyor Qualifications

Mr. Hirschler is a senior biologist with over 11 years of professional experience and a Bachelor of Science in wildlife biology. Mr. Hirschler holds a CDFW 2081(a) Memorandum of Understanding (MOU) to conduct presence/absence surveys for CBB via capture and handle. Mr. Rocks has over 24 years of professional experience and holds a M.S. in Biological Sciences from Southern Illinois University and a B.S. in Philosophy from Illinois State University. Mr. Goodman is a wildlife biologist with over eight years of professional experience and a Bachelor of Science degree in environmental science. Ms. Woldt is a wildlife biologist with over five years of professional experience and holds a Master of Science degree in biological sciences and a Bachelor of Science degree in ecology, animal behavior, and evolutionary biology. Mr. Badar is a biologist with two years of professional experience, and holds a Bachelor of Science degree in wildlife, fish, and conservation biology. All surveyors have taken entomological courses and workshops that included bumble bee identification. They each have experience conducting focused CBB surveys and are familiar with the identifying characteristics and preferred nectar sources of CBB.

Conclusion

Survey results were positive for CBB. One CBB was observed foraging in the northern portion of the project site on June 9, 2025. Additionally, seven yellow bumble bees and two unidentified *Bombus* individuals were recorded foraging within the project site. No bumble bee nests were documented within the project site during focused surveys conducted between April 29 and June 9, 2025.

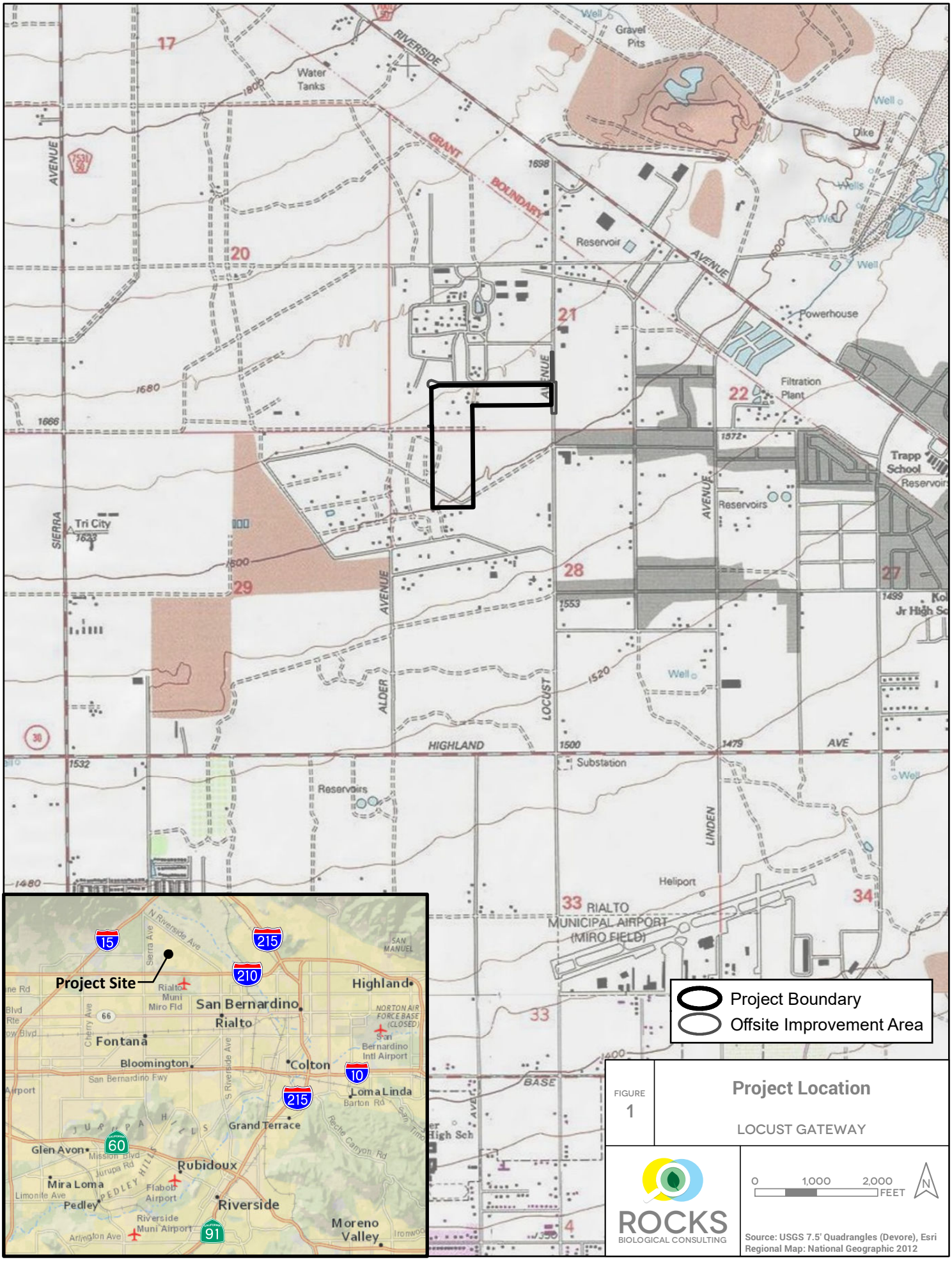
Please don't hesitate to call me at (714) 345-8619 if you have any questions.

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

Sincerely,

Ian Hirschler

Enclosures:
Figure 1 – Project Location
Figure 2 – Survey Results
Attachment A – Site Photographs
Attachment B – Nectar Sources Observed
Attachment C – *Bombus* Photographs
Attachment D – Invertebrate Species Observed
Attachment E – Surveyor Field Notes


Project Site
Project Boundary
Offsite Improvement Area
RIALTO MUNICIPAL AIRPORT (MIRO FIELD)
Heliport
Substation
Reservoirs
Water Tanks
Gravel Pits
Dike
Wells
Powerhouse
Filtration Plant
Trapp School Reservoirs
Tri City
RIVERSIDE
GRANT
BOUNDARY
AVENUE
SIERRA
ALDER
LOCUST
LINDEN
HIGHLAND
San Bernardino
Rialto
Fontana
Bloomington
Colton
Loma Linda
Grand Terrace
Highland
Glen Avon
Rubidoux
Mira Loma
Pedley
Riverside
Moreno Valley
FIGURE 1
Project Location
LOCUST GATEWAY
ROCKS BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
N
Source: USGS 7.5' Quadrangles (Devore), Esri Regional Map: National Geographic 2012

Laurel Ave
Lowell St
Summit Ave
Alder Ave
Locust Ave
Stonehurst Dr

Project Boundary
Offsite Improvement Area

Vegetation

Riversidean Sage Scrub
Riversidean Sage Scrub - Disturbed
Chaparral
Disturbed
Developed

Bombus Species Survey Results

Crotch's Bumble Bee (*Bombus crotchii*)
Yellow Bumble Bee (*Bombus californicus*)
Bumble Bee Species (*Bombus* sp.)

FIGURE 2

Survey Results

LOCUST GATEWAY

ROCKS BIOLOGICAL CONSULTING

0 125 250 FEET

N

Aerial Photo: Nearmap 2025

Attachment A
Site Photographs



Photo 1. View of chaparral habitat in the southern portion of the project site, facing northwest. June 9, 2025



Photo 2. View of chaparral habitat in central portion of the project site, facing west. April 29, 2025.



Photo 3. View of disturbed Riversidean sage scrub habitat in the southeastern portion of the project site, facing south. June 9, 2025.



Photo 4. View disturbed habitat dominated by non-native species in the northern portion of the project site, facing east. June 9, 2025.



Photo 5. View of Riversidean sage scrub habitat in the eastern portion of the project site, facing west. June 9, 2025.



Photo 6. View of a California buckwheat (*Eriogonum fasciculatum*) patch in the northeast corner of the project site, facing east. June 9, 2025.



Photo 7. View of disturbed area in the northeast portion of the project site dominated by shortpod mustard (*Hirschfeldia incana*) facing west. May 22, 2025.



Photo 8. View of disturbed habitat dominated by non-native species in the northern portion of the project site, facing southeast. April 29, 2025.

Attachment B

Nectar Sources Observed

Family	Scientific Name	Common Name
Asteraceae	*Centaurea melitensis*	Tocalote*
Asteraceae	*Gutierrezia californica*	California matchweed
Asteraceae	*Helianthus annuus*	Western sunflower
Asteraceae	*Heterotheca grandiflora*	Telegraphweed
Asteraceae	*Oncosiphon pilulifer*	Stinknet*
Asteraceae	*Senecio flaccidus*	Shrubby ragwort
Asteraceae	*Sonchus asper*	Prickly sow-thistle*
Asteraceae	*Uropappus lindleyi*	Silver puffs
Boraginaceae	*Amsinckia menziesii*	Common fiddleneck
Boraginaceae	*Cryptantha intermedia*	Common cryptantha
Boraginaceae	*Eucrypta chrysanthemifolia*	Common eucrypta
Boraginaceae	*Phacelia distans*	Common phacelia
Brassicaceae	*Hirschfeldia incana*	Short pod mustard*
Brassicaceae	*Sisymbrium irio*	London rocket*
Cactaceae	*Opuntia basilaris*	Beavertail cactus
Crassulaceae	*Crassula campestris*	Heath stonecrop*
Euphorbiaceae	*Croton californicus*	California croton
Euphorbiaceae	*Croton setiger*	Doveweed
Euphorbiaceae	*Euphorbia serpens*	Creeping spurge*
Euphorbiaceae	*Ricinus communis*	Castor bean*
Fabaceae	*Acmispon glaber* var. *brevialatus*	Short-winged deerweed
Fabaceae	*Acmispon micranthus*	Small flowered lotus
Fabaceae	*Melilotus albus*	White sweetclover*
Fabaceae	*Melilotus indicus*	Indian sweetclover*
Geraniaceae	*Erodium cicutarium*	Storksbill*
Lamiaceae	*Marrubium vulgare*	White horehound*
Linaceae	*Salvia columbariae*	Chia sage
Linaceae	*Salvia mellifera*	Black sage

Family	Scientific Name	Common Name
Onagraceae	*Camissonia hirtella*	Hairy sun cup
Onagraceae	*Camissoniopsis bistorta*	California sun cup
Plantaginaceae	*Penstemon spectabilis*	Showy penstemon
Polemoniaceae	*Eriastrum sapphirinum*	Saphire woolly-star
Polemoniaceae	*Navarretia* sp.	*Navarretia* species
Polygonaceae	*Eriogonum fasciculatum* ssp. *foliolosum*	California buckwheat
Primulaceae	*Lysimachia arvensis*	Scarlet pimpernel*
Ranunculaceae	*Delphinium cardinale*	Cardinal larkspur
Rosaceae	*Adenostoma fasciculatum*	Chamise
Rosaceae	*Prunus ilicifolia*	Holly-leaf cherry
Solanaceae	*Nicotiana glauca*	Tree tobacco*
*Non-native species		

Attachment C

Bombus Photographs



Photo 1. Photo of Crotch's bumble bee (*Bombus crotchii*) individual captured, photographed for identification, and released. June 9, 2025.



Photo 2. Photo of yellow bumble bee (*Bombus californicus*) individual captured, photographed for identification, and released. June 9, 2025



Photo 3. Photo of yellow bumble bee individual captured, photographed for identification, and released. June 9, 2025.



Photo 4. Photo of yellow bumble bee individual captured, photographed for identification, and released. June 9, 2025.



Photo 5. Photo of yellow bumble bee individual captured, photographed for identification, and released. June 9, 2025.



Photo 6. Photo of yellow bumble bee individual captured, photographed for identification, and released. June 9, 2025.

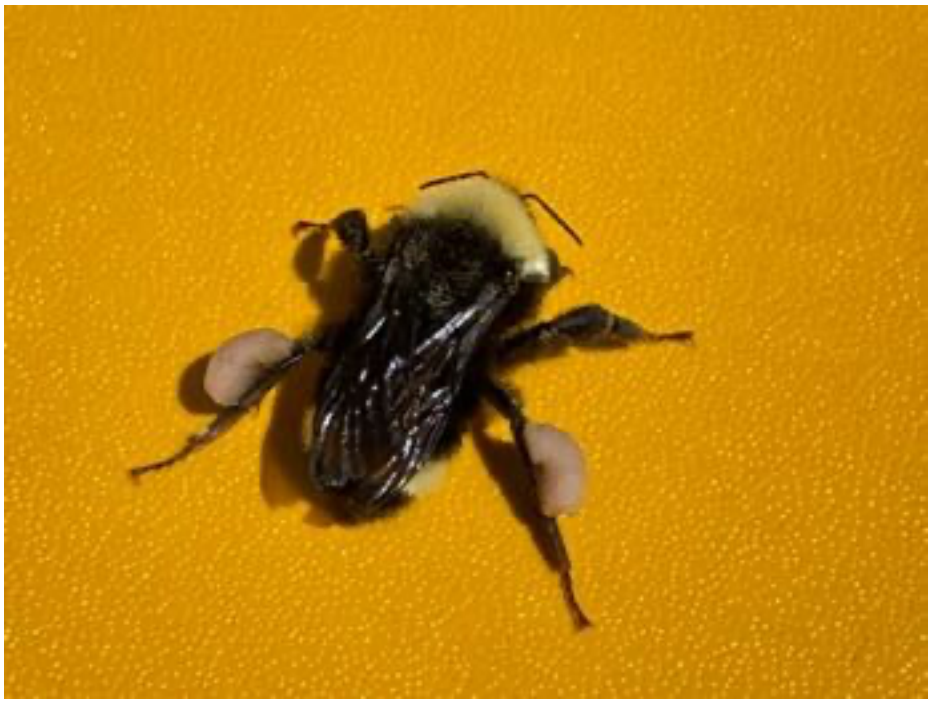


Photo 7. Representative photo of a yellow bumble bee individual captured, photographed, and released. April 29, 2025.



Photo 8. Photo of yellow bumble bee individual captured, photographed, and released. May 22, 2025.

Attachment D

Invertebrate Species Observed

Family	Scientific Name	Common Name
Acrididae		Locust
Andrenidae	*Andrena* sp.	Mining bee species
Anisoptera (suborder)		Dragonfly
Apidae	*Apis mellifera*	European honeybee*
Apidae	*Apis* sp.	*Apis* species
Apidae	*Bombus californicus*	California bumble bee
Apidae	*Bombus crotchii*	Crotch's bumble bee (CSE)
Apidae	*Bombus* sp.	Bumble bee species
Apidae	*Centris* sp.	Digger bee species
Apidae	*Osmia* sp.	Mason bee species
Asilidae		Robber fly
Bombyliidae		Bee fly
Coccinellidae	*Coccinella californica*	California ladybird beetle
Coccinellidae	*Coccinella septempunctata*	Seven-spot ladybird beetle*
Dermaptera (order)		Earwig*
Formicidae	*Pogonomyrmex barbatus*	Red harvester ant
Hesperiidae	*Hylephila phyleus*	Fiery skipper
Lycaenidae	*Euphilotes bernardino*	Bernardino blue
Meloidae	*Lytta auriculata*	Red-eared blister beetle
Nymphalidae	*Vanessa cardui*	Painted lady butterfly
Pieridae	*Pieris rapae*	Cabbage white butterfly*
Pieridae	*Pontia protidice*	Checkered white butterfly
Reduviidae		Assassin bug
Riodinidae	*Apodemia mormo*	Mormon metalmark
Riodinidae	*Apodemia virgulti*	Behr's metalmark
Saturniidae	*Hemileuca electra*	Electra buckmoth
Scarabaeidae	*Paracotalpa ursina*	Little bear beetle
Scoliidae		Scoliid wasp

Family	Scientific Name	Common Name
Tenebrionidae	*Eleodes* sp.	Darkling beetle species
Thomisidae		Crab spider
Vespidae	*Polistes* sp.	Paper wasp species
Zygoptera (suborder)		Damsel fly

*Non-Native Species

CSE: Candidate for listing under California Fish and Game Commission (CFGC) California Endangered Species Act

ATTACHMENT E

SURVEYOR FIELD NOTES

LOCUST CBB #1 4/29/25 47
KW, IH

1030	65°	0-2	0%
1430	76°	4-8	20%

*One BOMBUS furvidus, NO CBB!

Nectar Sources: GUTCAL
PENSPE ERIFAS NICGLA
HIRINC EROCIC ACMGLA
HETGLA CROCAL CAMBIS
SALCOL OPUBAS AMSPEN
CROSET SISIRI CRYINT
PHADIS PRUILI MELIND
ENCCAL MARVUL SALMEL

- Dragonfly
- Electra buckmoth
- Behr's metalmark Lytta aurinculata

Continued

INSECTS: ARACHNIDS:

- Apis mellifera
- Bombillid
- Vespid
- Native ladybeetle
- 7-spot ladybeetle
- Red harvester ant
- Grab spider
- Asilidae

PAGE 1/2

Scale: 1 square = _____

Rite in the Rain

48 (PAGE 2/2) 4/29/25

*1345 → Bombus sp.
caught ♂ put on ice
→ was nectaring on
PENSPE
→ IDed to Bombus
fervidus californicus

4/29/25 LOCUST GATEWAY CBB #1

IH, KW

	TIME	TEMP	CC	WIND
START	1030	65	0%	0-2
END	1430	76	20%	4-8

PENSPE(FL) HIRINC(FL) ERIFAS(FL) Bombyllid

ACMGLA(FL) Apis mellifera Vespid (Polistes sp.) Syrphid

CAMBLS(FL) CROCAL(FL) MARVUL(FL) ~~HERGRA~~ HETGRA(FL)

SALCOL(FL) NICGLA(FL) Apis sp.? CEYINT(FL)

PHADIS(FL) EUCCHR(FL) PAULI(FL) Hylephila phyleus

Apodemia virgulti Odonata SALMEL(FL) Blister beetle

Bombus ~~edw~~ fervidus - On Penstemon spectabilis 1345
californicus

Assassin Bug.

5/22/25 LOCUST GATEWAY CBB #2
IH, JR, AG RARE PLANTS #2

	TIME	TEMP	CC	WIND
START	1035	81	10%	0-3
END	1430	87	5%	3-7

PENSPE ACMGLA ERIFAS HIRNC Apis mellifera
Asilidae Apodemia virgulti CROCAL Apidae
Centris sp. Osmia sp. Euphilotes bernardino
CENMEL CAMBIS Beetle (Little bear) Andrena sp.
Vanessa cardui PHADIS HETGRA CRYINT
NAV sp. Bombus sp. Erynnis sp. Odonata
MELND Assassin bug (Red/black) Lady bird beetle (7)
Locust? Damsel fly (blue) MURVUL LYSARV SALMEL
AOEFAS ~~EGG~~ SALCOL Scoliid NICGLA

Bombus fervidus 1408 on PENSPE californicus

K-4

5/22/25

Rivian w AG + IH met at Mini Parkinkit

Locust Gateway CBB + Rare Plants

	Time	Temp	Wind	Sky cover
Start	1045	81	1-3	10%
Stop	1430	87	3-7	5%

- good soil (moss) crust and annual diversity in many openings

Acm gla bre (FI) Opu phae Pen spect (FI)
Hir Inc (FI) Cro Cal (FI) Con Mel Ant Cal Son tsp (FI)
*Euph serp (FI) One Pil (FI) Erio Fas Fdlo (FI)
*Crass camp (FI) Ero Cic (FR) Nic Gla (FI) Phac dist (FI)
Het Gra (FI) Bro Dia Bro Rub PRU III Uro Lind (FR)
*Cam Bis (FI) *Cam hir (FI) Urt Uren Cheno sp.
Ade Fas (FI) Ams Men (dried) Ric Com *Pec (FR)
Sen Flac (FI) *Nav atracty lordes (FI) Dit Gra Still linearis (FR)
*Asteraceae - milky sap, peduncle from lf axil (see photos, leaf spc)
Rhus arom Chen Cal Sal Col (FI) Mar Vul *Clematis pauc
Cut Cal Sal Mel (FI) Cea Cun Rha Cro

Uta stan RTHA Aud Cot
Apodemia mormo
Odonata GHOW BEWR
MODO LEGO NRWS
HOFI ATFL BASW
Apis mel LAGO BUSH
Bernardino blue *Bombus fervidus (on Pen spec)
W-Tiger Whip CaGs

Erlog Gracile
Sis Trio
*Chorizanthe parryi parryi

8 AB IH Lowst GATEWAY 5/22
JR CBB #2 BARE PLOTS #2
1045 81 0-3 10%
1430 87 3-7 5%

insects ↓ X
Apis mellifera
bee wasp
assilidae
Odonata
Behr's metalmark
Centris (esp bee)
oak white butterfly
bernardino blue
Carolina
little bee scarab beetle
Painted lady
7 spotted ladybird
Checkered white
No spot ladybug
STILT SAND

Chorus the spp

Nectar sources
RENSPE
HYRINL
ERIFIS
ACMGLA
CROCAL
EROCIL
OXYMBEL
ONUPIL
PITADES
Nav sp.
ACMMEL
SALMEL
CRYPNT
CYMHER
ADELPHAS
HELIANN
NEL GLA
RELWOM
SENFIL

Scale: 1 square = _____

plants

HSRSNC EREFIAS PENSPE MCMGLA
DRUPHA CROCAL CRAMM ERUCIC
CENMEL CAMBIS LOGGAL ONCPEC
RICCOM AMSMEN ENCCAL PHADES
BRODIA BRORUB HETGRA VERENC
Nyctinia sp. ACMMIC SMEMEL CRYENT
UROLEP CHMHIR CYLBER DATWKE
MOEMAS ARTCAL PRUILL HELANN
USCGLA URTURN MULVAR CROSET
Pectocarya sp. SENFLA DITGRA STICEN
RIVARO STRCOU CEACUN CHECAL

WL:

HOFF LEGO ENCO CORA RTHA
ATFL BARS LAGO HOWR
CALT AMU LENT GHAW

Side blotched L zn
v hyks whipsnk
CRGS
desert cottontail
clematis sp GUTCAL
RHACRO LYS ATRV

Scale: 1 square = _____

6/9/25 LOCUST GATEWAY CBB #3

1H, 1B

	TIME	TEMP	CC	WIND
START	0945	67	50%	3-6
END	1345	80	20%	1-4

ERIFAS HIRINC
ACMGLA PENSPE
CROCAL CONMEL
SENFLA ADEFAS
MARVUL ERISAP
DELCAR NAV
NICGLA MELALB

Pontia protodice
Euphilotes bernardin
Apis mellifera
Pieris rapae Odonat
Apodemia virgulti
Andrena sp. 7 spot ladybeet
Scoliidae Vanessa cardui
Bombus
Polistes sp Bombyli
Assassin bg. Asilido

MODO LENI HOFI LEGO CORA SAPO
ASTL UTA RTHA COCO ATFL CLSW BARS
CAGS AVCO CALT

1) Bombus sp. (1045) - PENSPE - B. fervidus
2) Bombus sp. (1103) - PENSPE - B. fervidus
3) Bombus sp. (1109) - SALMEL - B. fervidus
4) Bombus sp. (1109) - SALMEL - Didn't catch
5) Bombus sp. (1130) - PENSPE - B. fervidus
6) Bombus sp. (1205) - ERIFAS - B. crotchii
7) Bombus sp. (1209) - ERIFAS - B. fervidus

1B Locust Gateway CBB #3 6/9/25

1A Start: 945 87°F 50% 3-6 mph

End: 1345 80°F 20% 1-4 mph

Flowering plants	Insects
ERIFAS	bumblebee hive
Ascl[illegible] glauca	Apis Mellifera
Penstemon spectabilis	Cabbage White
CENMEL	Behr's Metalmark
Eriastrum sapphirinum	Paper Wasp
Delphinium cardinale	Bombus 1: nectaring on PENSPE; captured for ID
▷ Check host plant for	Bombus 2: ← for ID
SALMEL	Bombus 3: nectaring on
Senecio flaccidus	SALMEL, captured for ID
NEGLE	Bombus 4: landing
RICCOM	sight on SALMEL
Navarretia sp?	Bombus 5: Nectaring on
ENCFER	PENSPE, captured for ID
Black mustard	

Other Species: HOFI, LEGO, CORA, LENI, CHGO, desert cottontail, MODO, RTHA, Coachwhip - yellow-bellied Racer, Side-blotched Lizard, ATPE

Notes: Lots of bumblebees flying around ERIFAS, RTHA flying overhead

Scale: 1 square = _____

Insects cont

Confirmed CBB →
- Checkered white
- Bombus b: on ERIFAS, caught for ID
- Bombus t: on ERIFAS, caught for ID
- lady bug
- Assassin bug
- Robber fly - (eating a honey bee)

Scale: 1 square = _____