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PACIFICA COTTONWOOD PROJECT

(APN 478-250-001)

FOCUSED BURROWING OWL SURVEY REPORT

CITY OF MORENO VALLEY, RIVERSIDE COUNTY, CALIFORNIA

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EXECUTIVE SUMMARY

Blackhawk Environmental conducted a literature review, field reconnaissance survey and biological assessment of the proposed Pacifica Cottonwood Project (Project) site on May 5, 2021, to assess existing site conditions, as well as assess the potential for sensitive species or habitats to occur within and/or adjacent to the Project site. The results of this survey effort are summarized in the *Pacifica Cottonwood Western Riverside MSHCP Habitat Assessment Report* (Blackhawk Environmental 2021). The Project is an approximately 23.48-acre development site proposed in the City of Moreno Valley, Riverside County, California. The Project site is located on Assessor's Parcel Number (APN) 478-250-001. The Project is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The site is best characterized as previously graded and/or disked, disturbed land that is regularly mowed. The Project is located within an area necessitating surveys for burrowing owl (*Athene cunicularia*; BUOW). The Blackhawk Environmental Habitat Assessment Report (HAR) identified habitat suitable for burrowing owl during the May 5, 2021 site visit, as well as identified suitable burrows during the Focused Burrow Survey on June 22, 2021. Pursuant to MSHCP Section 6.3.2 *Additional Survey Needs and Procedures*, focused surveys for burrowing owl are required within designated survey areas of the Plan and suitable habitat.

To support Project consistency with Plan guidelines, Blackhawk Environmental was contracted to perform focused surveys for burrowing owl per the Burrowing Owl Survey Instructions for the Plan Area (2006). The initial habitat assessment, focused burrow survey, and this focused burrowing owl survey effort resulted in the detection and mapping of numerous burrows suitable for burrowing owl within the Project and associated 150-meter buffer (Survey Area). **No burrowing owls or sign were observed during the surveys.**

Following the MSHCP recommendation of a preconstruction burrowing owl survey within 30 days prior to construction, no negative impacts to burrowing owl are anticipated. Preconstruction presence/ absence surveys for burrowing owl should be conducted within the Project area within 30 days prior to ground disturbance to avoid direct take of burrowing owls. Preconstruction survey methods should follow those described in the Burrowing Owl Survey Instructions for the MSHCP Plan Area; *Pre-construction Surveys* (2006). If burrowing owls are determined to occupy the site or the immediate vicinity, the City of Moreno Valley Planning Department will be notified, and avoidance measures will be implemented during the breeding season (March 1 through August 31). If burrowing owls are present during the non-breeding season (September 1 through February 28), burrowing owl exclusion measures may be implemented in accordance with the Plan.

1.0 INTRODUCTION

Blackhawk Environmental (Blackhawk) was contracted under EPD Solutions to conduct focused burrowing owl surveys at the Pacifica Cottonwood Project (Project) site, located on approximately 23.48 acres of previously undeveloped lands in the City of Moreno Valley, Riverside County, California. The Project site is within the MSHCP area; however, the Project is not located within a MSHCP Cell Group or MSHCP Criteria Cell(s).

Focused surveys for burrowing owl were required for the Project site as a result of the findings during the initial habitat assessment on May 5, 2021. Specifically, this habitat assessment was conducted to determine if habitat was present for species identified in the Conservation Summary Report Generator that may require additional focused species survey efforts, including burrowing owl.

The initial habitat assessment was conducted on May 5, 2021, which identified suitable habitat for burrowing owl, and was followed by the focused burrow survey, conducted on June 22, 2021, which identified suitable burrows. Based on the presence of suitable habitat and burrows within the Project and surrounding 150-meter buffer (Survey Area), additional focused surveys for burrowing owl were required for consistency with the Plan. This report describes the results of the focused burrowing owl survey effort conducted for the Project site.

The habitat assessment also identified one drainage feature that runs parallel to the western boundary of the Project site that contains MSHCP riparian/riverine habitat that may potentially fall under the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Based on these findings, a jurisdictional delineation was performed on August 18, 2021. Findings of the jurisdictional delineation survey can be found in the *Pacifica Cottonwood Project – Jurisdictional Delineation Survey Report* (Blackhawk 2021).

1.1 Project Description

The Project proposes complete buildout for residential and/or commercial development of an approximately 23.48-acre parcel in the City of Moreno Valley. Proposed development engineer plans involve the construction of residential homes, paved streets and sidewalks, landscaped areas and all associated infrastructure and would permanently convert the vacant land to development. The Project site is identified as APN *478-250-001*.

The proposed Project is located within previously graded/disked, regularly mowed, vacant land dominated by low-growing non-native and ruderal vegetation. The site is surrounded by urban development in addition to several scattered vacant lots. The site is bounded to the west by Quincy Street, to the east by private residential development, to the north by Cottonwood Avenue and to the south by Bay Avenue and additional vacant lands. The site shows signs of recent anthropogenic impacts such as mowing, trash dumping, disking, and off-road vehicle use. Habitat within the 150-meter Survey Area to the east of the Project and portions of the north, south, and west were excluded from the survey due to lack of potential habitat within fully developed lands and/or a complete lack of suitable burrows. The Project site consists of a mostly flat lot; elevations within the Project site range from 1,639 feet above mean sea level (AMSL) in the southeast corner at its lowest point, and up to 1,664 feet AMSL at the northwestern corner at its highest point.

2.0 REGULATORY SETTING

The Plan is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County.

The Plan serves as an HCP pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA), as well as the Natural Communities Conservation Planning (NCCP) under the NCCP Act of 2001. The Plan will be used to allow the participating jurisdictions to authorize "take" of plant and wildlife species identified within the Plan area. The United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) (together, Wildlife Agencies) have authority to regulate the take of threatened, endangered, and rare species. Under the Plan, the Wildlife Agencies will grant "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the Plan Conservation Areas, in exchange for the assembly and management of a coordinated MSHCP Area through collection of Plan Mitigation Fees. The Plan is designed to provide mitigation compliance under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), California Environmental Quality Act (CEQA), and National Environmental Protection Act (NEPA) with payment of a development mitigation fee to the appropriate local jurisdiction and completion of requisite habitat assessments/focused surveys for projects within those jurisdictions.

Pursuant to MSHCP Section 6.3.2 *Additional Survey Needs and Procedures*, focused surveys for burrowing owl are required within designated survey areas of the Plan and suitable habitat. The Project is located within a Cell requiring habitat assessments for burrowing owl. An initial HAR for the Project site identified the Project site as within a survey area for burrowing owl, and suitable habitat and burrows were identified on site; therefore, focused burrowing owl surveys became required for Project approval (Blackhawk Environmental 2021).

3.0 METHODS

3.1 Step I: Habitat Assessment

An initial habitat assessment was conducted by Blackhawk Principal Biologist Kris Alberts on May 5, 2021 by walking meandering transects throughout the entirety of the Project site. The habitat assessment identified the presence of suitable burrowing owl habitat and suitable burrows within the Survey Area. When it was not possible to access the 150-meter buffer zone, the Survey Area was visually inspected with binoculars. Habitat was mapped in the field on the ESRI ArcGIS Collector application for later use in Geographic Information System (GIS) analysis and figure creation.

Table 1. Habitat Assessment Conditions

Biologist(s)	Date	Time	Air Temperature (°F)	Wind Speed (mph)	Cloud Cover (%)	Precipitation
Kris Alberts	5/5/2021	1450-1550	90-91	4-10	80-70	None

3.2 Step II, Part A: Focused Burrow Survey

A systematic search of the Project Survey Area for BUOW-suitable burrows and burrowing owl sign was conducted on June 22, 2021 by two biologists walking transects through suitable habitat. Survey transects were spaced five to 15 meters apart to provide 100 percent visual ground coverage. Where habitat, terrain or other factors necessitated, transect width was reduced to achieve 100 percent visual ground coverage. For inaccessible areas, biologists scanned the area with binoculars to ascertain presence/absence of burrowing owls. During the search, suitable burrowing owl habitat mapped during the habitat assessment was verified and updated, as needed. All suitable burrowing owl burrows, man-made structures that could potentially support burrowing owls, and potential burrowing owl sign was mapped in the field on aerial photos and Global Positioning System (GPS) coordinates were recorded.

3.3 Step II, Part B: Focused Burrowing Owl Survey

Focused burrowing owl surveys were conducted on four separate days during the burrowing owl breeding season (March 1 through August 31). The first focused burrowing owl survey was conducted concurrently with the focused burrow survey described in *Part A: Focused Burrow Survey*. All surveys were conducted in weather conditions conducive to detecting burrowing owls outside their burrows and observing burrowing owl sign.

Three additional focused surveys for burrowing owl were conducted by walking throughout the entire Survey Area and began within one hour of sunrise and concluded within two hours after sunrise. Survey methods followed those described in the Burrowing Owl Survey Instructions for the Plan Area (2006).

Prior to starting transects and upon arrival to the Project site, the biologist scanned the Survey Area with binoculars to ascertain presence/absence of burrowing owls. Following the initial scan of the Survey Area, the biologists followed the same survey protocol described in Section 3.2. During the focused surveys, all suitable burrows were first scanned for occupation by burrowing owl. If no owls were observed, suitable burrows were directly inspected for changes in status and burrowing owl sign.

4.0 RESULTS

An initial habitat assessment for burrowing owl was conducted during the May 5, 2021 site visit per the *Step 1: Habitat Assessment* of the Burrowing Owl Survey Instructions for the Plan Area (2006). The June 22, 2021 visit included concurrent surveys according to *Step 2 Part A: Focused Burrow Surveys* and to *Step 2 Part B: Focused Burrowing Owl Surveys* of the Burrowing Owl Survey Instructions for the Plan Area (2006). Surveys were conducted in compliance with the Burrowing Owl Survey Instructions for the Plan Area (2006) and were not conducted within five days following a rain event.

Burrowing owl habitat within the Project site includes all Disturbed Areas. While the Project site is composed of regularly disked, open, disturbed vegetation suitable for burrowing owl foraging, nesting opportunities are limited to those areas supporting potential host burrows. Within the Survey Area, the concrete-lined drainage channel along the western edge of the Project Site and the open, disturbed lot northwest of the Project Site were surveyed due to potential for suitable burrows. Developed areas surrounding the Project Site were excluded from the surveys due to lack of suitable burrows or burrow surrogates.

The Project site exhibits previously graded and/or disked soils that are regularly mowed and disturbed through other anthropogenic activities such as trash and debris dumping, off road vehicle use and foot traffic. The site is dominated by low-growing non-native grasses and ruderal vegetation. Suitable burrows occur throughout the entire site and portions of suitable habitat within the Survey Area. All the burrows documented showed no BUOW sign or occupation and the vast majority showed very recent signs of California ground squirrel (*Otospermophilus beecheyi*) use, such as cleared runways between burrows, footprints, scat and dig-outs.

Due to the presence of suitable burrowing owl habitat onsite, four focused burrowing owl surveys were conducted, the first of which was conducted concurrently with Part A described above. Table 2 below summarizes survey conditions for the focused surveys.

Table 2: Focused Burrowing Owl Survey Conditions

Biologist(s)	Date	Time	Temperature (°F)	Wind Speed (mph)	Cloud Cover (%)	Precipitation
Seth Reimers, Hayley Milner	6/22/2021	0554-0739	64-67	1-3	60-70	none
Hayley Milner, Katie Quint	6/30/2021	0542-0740	63-71	0-2	5-35	none
Hayley Milner, Katie Quint	7/8/2021	0545-0744	73-76	0-2	0	none
Hayley Milner, Katie Quint	7/15/2021	0545-0746	74-78	0-1	0-5	none

A total of 101 individual BUOW-suitable burrows and 23 BUOW-suitable burrow complexes were identified within the Survey Area. Burrow complexes (3 or more burrows) were mapped collectively due to the proximity of burrows to one another (generally within two meters). Specific locations of all suitable burrowing owl burrows can be found in Figure 2. No burrowing owls and/or burrowing owl sign

were observed during the focused surveys. Furthermore, most burrows were identified as either having fresh California ground squirrel sign, debris, spiderwebs, and other items partially covering the burrow opening. Burrows were generally evenly distributed throughout the Project Site, apart from a near absence in the southwest quarter and a higher density of BUOW-suitable burrows in the northwest corner of the parcel. Optimally suitable areas were correlated with high California ground squirrel activity.

Burrows ranged in size from 8 to 20 centimeters in diameter, with the vast majority of suitable burrows being California ground squirrel burrows. Ground squirrels were directly observed throughout the site and the majority of potential burrows showed sign of current occupation by ground squirrels (fresh soil aprons, scat, tracks, plant debris, etc.). Burrows were located within areas of non-native grasses, areas of previously disturbed soil, and along the drainage channel bank. Maps depicting all suitable burrowing owl burrows and burrow complexes, as well as potential foraging and nesting habitat, are included in Attachment A – Figures. Representative photographs of the Project site, suitable habitat, and BUOW-suitable burrows observed during the survey period are included in Attachment B – Site Photographs.

Avian species observed included: American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), American kestrel (*Falco* sparverius), hooded oriole (*Icterus cucullatus*), Anna's hummingbird (*Calypte anna*), red-tailed hawk (*Buteo jamaicensis*), bushtit (*Psaltriparus minimus*), house sparrow (*Passer domesticus*), western kingbird (*Tyrranus verticalis*), European starling (*Sturnus vulgaris*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), Eurasian collared-dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), northern mockingbird (*Mimus polyglottos*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Melozone crissalis*), Costa's hummingbird (*Calypte costae*), northern rough-winged swallow (*Stelgidopteryx serripennis*), Nuttall's woodpecker (*Dryobates nuttallii*), great blue heron (*Ardea herodias*)

5.0 POTENTIAL IMPACTS

No burrowing owls or burrowing owl sign were identified during the survey efforts, therefore, no impacts to burrowing owls are anticipated to occur. Furthermore, while suitable burrows were present onsite, the majority appeared to be currently occupied by California ground squirrels or were covered by debris indicating no occupancy. Based on the Burrowing Owl Survey Instructions for the Plan Area (2006), preconstruction presence/absence surveys for burrowing owls should be conducted within 30 days prior to ground disturbing activities to avoid potential direct impacts to burrowing owls.

6.0 CONCLUSION AND RECOMMENDATIONS

Focused BUOW surveys took place on the 23.48-acre Project Site and associated 150-meter survey buffer for the proposed Pacifica Cottonwood Project in the City of Moreno Valley, Riverside County, California. While there were numerous suitable BUOW burrows mapped in the Survey Area, no burrowing owl or their sign were observed during the focused BUOW surveys. With the recommendation of a preconstruction BUOW survey within 30 days prior to construction, no negative impacts to the species are anticipated. The reported final (fourth) focused BUOW survey conducted on July 15, 2021, satisfies this recommendation if initial ground disturbance for the Project begins within 30 days of this survey. An additional pre-construction BUOW take avoidance survey is therefore only recommended for ground disturbance occurring on or after August 15, 2021.

With the implementation of the proposed mitigation measure for potential Project-related impacts to burrowing owl, the Project will fulfill the requirements related to biological resources pursuant to CEQA and the Plan.

- **MM-BUOW 1:** Within 30 days of construction, conduct take avoidance surveys for burrowing owl per guidelines specified in the Western Riverside County Regional Conservation Authority Burrowing Owl Survey Instructions for the Plan Area (2006).

- **MM-BUOW 2:** If burrowing owls are observed to occupy the Project site and/or adjacent areas during take avoidance surveys or incidentally during construction, the City of Moreno Valley Planning Department will be notified, and avoidance measures may be implemented during the breeding season (March 1 through August 31). If burrowing owls are present during the non-breeding season (September 1 through February 28), burrowing owl exclusion measures may be implemented in accordance with the Plan.

7.0 SURVEYOR CERTIFICATION

All data, statements, analyses, findings, and attachments within this report are accurate and truthful in terms of describing the existing conditions at the time of the surveys and the Project as proposed to Blackhawk Environmental, Inc. By adhering to the mitigation measure proposed within this report and/or payment of appropriate fees, compensatory mitigation related to the complete the Project will be met to CEQA significance thresholds for burrowing owl.

Seth Reimers
Senior Biologist

8.0 REFERENCES

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ATTACHMENT A

Figures

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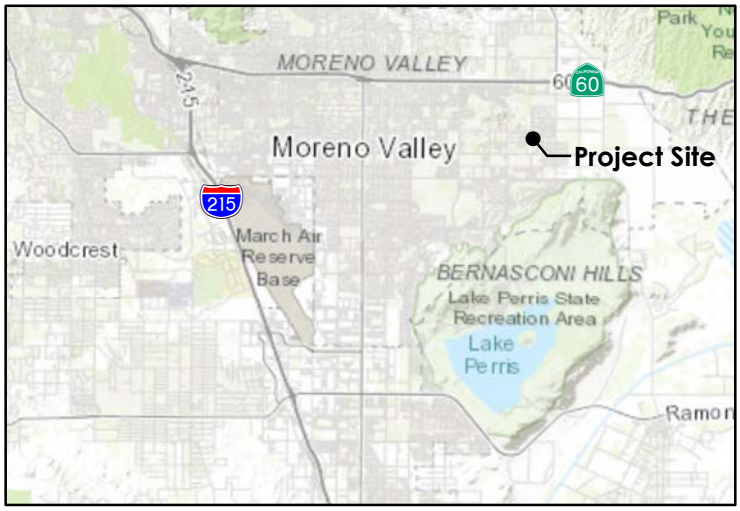
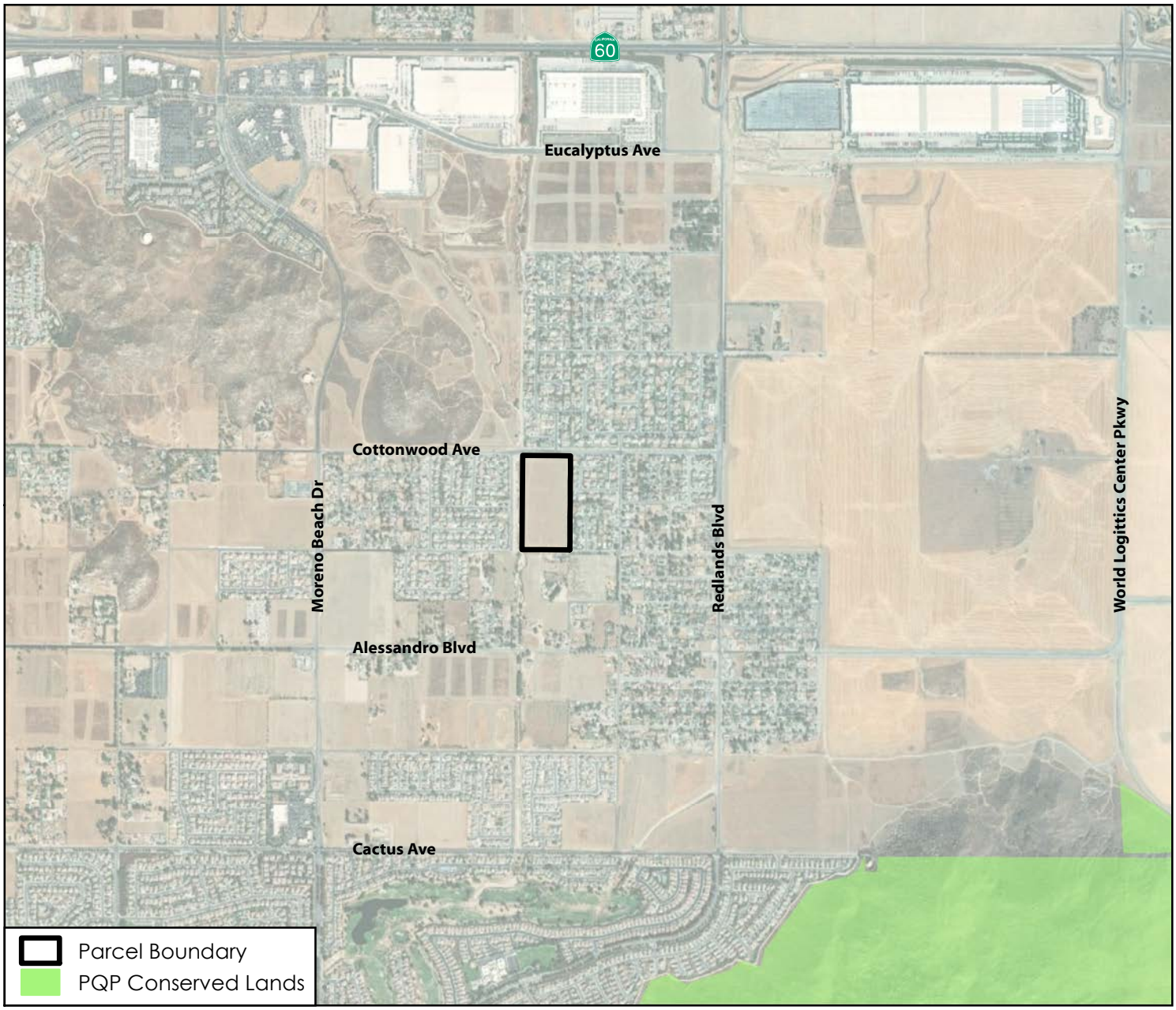




Source: Maxar, Esri 2020

Figure 1

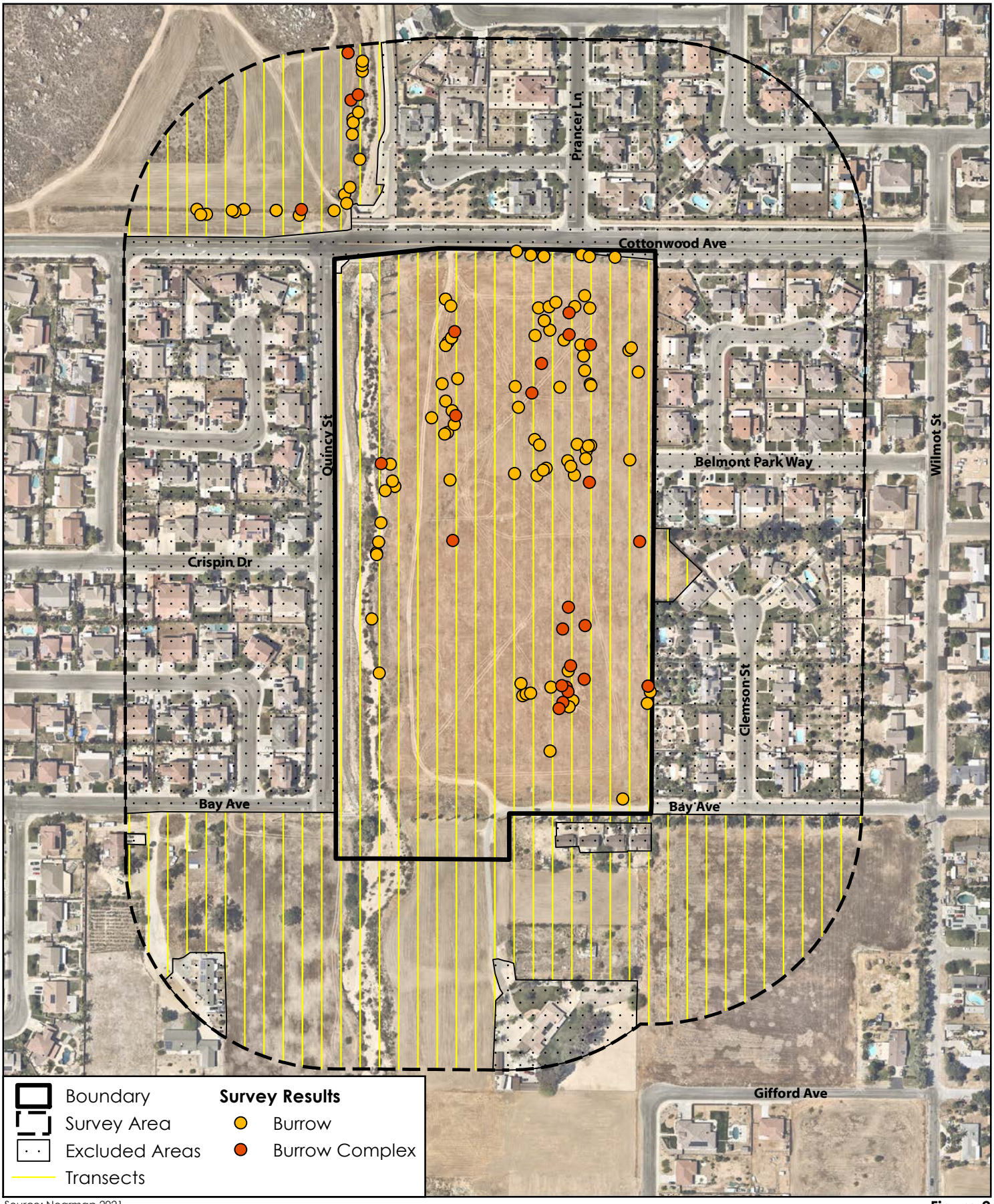
Project Vicinity and Location

Pacifica Cottonwood Project

BLACKHAWK Environmental

N

0 2,000 Feet



Source: Nearmap 2021

Figure 2

Burrowing Owl Survey Results

Pacifica Cottonwood Project

BLACKHAWK Environmental

N

0 300 Feet

ATTACHMENT B

Photo Pages

Blackhawk Environmental

Photograph 1: South-facing photo of the Project Site consisting of disturbed habitat of non-native grasses and recently disked/graded soils.

Photograph 2: Southeast-facing photo of disturbed habitat in the Project Site, consisting of non-native grasses, vehicle track marks, and recently disked soils.

Photograph 3: Southwest-facing photo of the riverine habitat in the flood channel located along the western boundary of the Project Site.

Photograph 4: East-facing photo of northern boundary of Project Site; disked soils bounded by non-native grasses and ornamental landscaped species.

Photograph 4: East-facing photo of suitable burrowing owl habitat located in the 150-meter buffer northwest of the Project Site.

Photograph 5: Southwest-facing photo of a suitable burrow among non-native grasses located within the Project Site.

Photograph 6: Representative photo of a suitable burrow along the bank of the water channel.

Photograph 7: South-facing photo of a suitable burrow with large apron and ground squirrel tracks.

Photograph 8: Representative photo of a suitable burrow located under a piece of concrete along bank of the drainage channel.

Photograph 9: Representative photo of a burrow complex with ground squirrel dig-outs and tracks.

Photograph 10: Representative photo of burrow with ground squirrel dig outs and runway to another burrow.

Photograph 11: Representative photo of a suitable surrogate burrow (old pipe), located along the western-facing bank of the drainage channel.

Photograph 13: Representative photo of a suitable burrow amongst a rubble pile along the edge of riverine habitat in the Survey Area.

Photograph 14: Representative photo of a suitable burrow entrance covered with spiderwebs and debris, indicating inactiveness.