

MSHCP Burrowing Owl Habitat Assessment Report 8.37-Acres Northwest Commercial Center Project Site

*Located in Section 8 of Township 3 South, Range 3 West
of the Sunnymead, CA USGS 7.5 minute Topographic Map
APN # 479-631-010*

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Survey Dates: April 8, 2022

Report Date: April 11, 2022

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Appendix A. Site Photos

I. INTRODUCTION

This report describes the findings of a burrowing owl (*Athene cunicularia*) habitat assessment as part of compliance with the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) conducted by Kelly Rios, Senior Biologist. This habitat assessment is intended to provide information about the potential for burrowing owl to occur on site based on the current site conditions. If there is a potential for burrowing owl to occur, additional focused surveys may be necessary.

Project Site Location

The 8.37-acre project site (APN # 479-631-010), hereafter referred to as “site”, is located north of State Route (SR) 74, south of SR 60, west of SR 79, and east of Interstate 215 (Exhibit 1). The site location can also be described as being in Section 8 of Township 3 South, Range 3 West of the *Sunnymead*, CA USGS 7.5-minute topographic map (Exhibit 2). Specifically, the site is located at the northwest corner of Alessandro Boulevard and Lasselle Street, and bounded to the north by Timo Street (Exhibit 3).

Project Description

The proposed Northwest Commercial Center Project consists of a fueling station, express carwash, fast-food, restaurant, and retail space, as well as associated infrastructure. The parcel is currently an undeveloped, disturbed lot that has been previously disked.

Figure 1. Regional Vicinity Map, Aerial Base

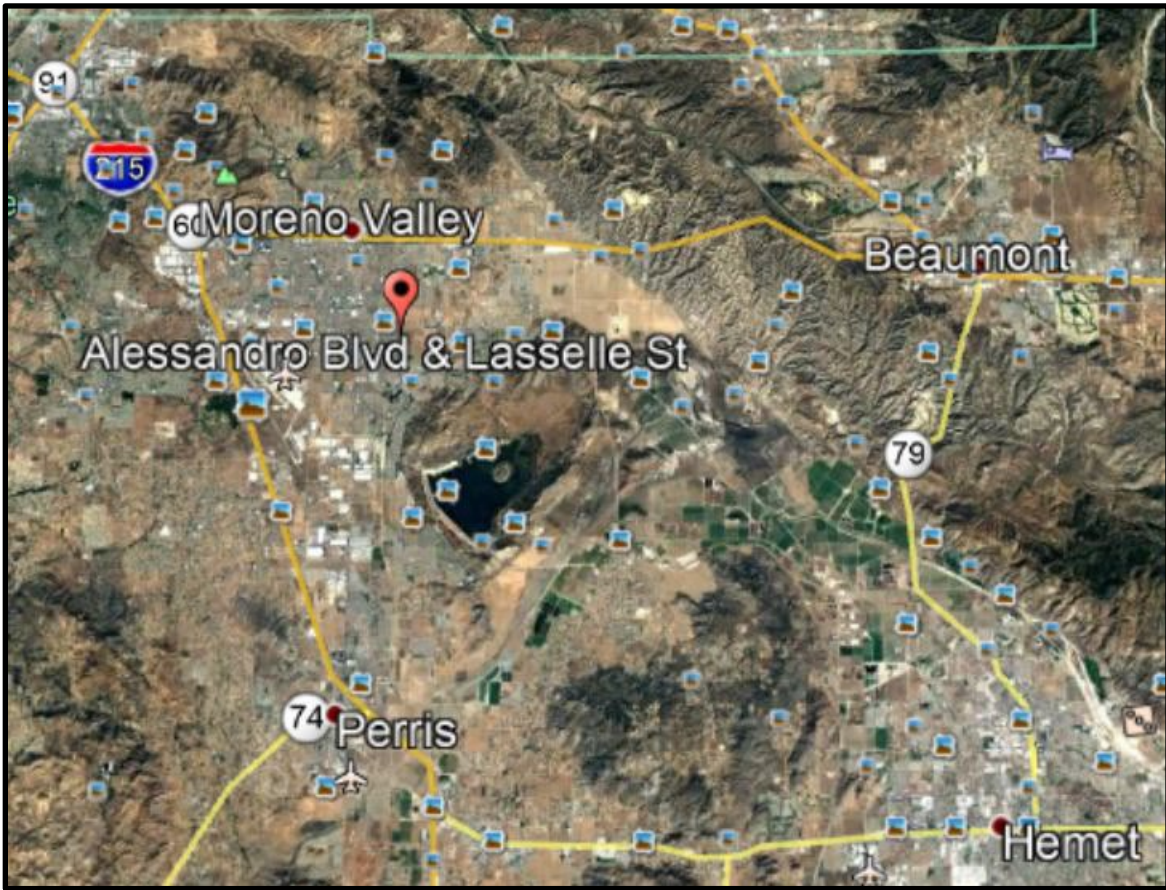


Figure 1: Regional Location Map
Empire Design Group, Inc, Northwest Commercial Center
MSHCP Habitat Assessment for the Burrowing Owl

Figure 2. Regional Vicinity Map, Topographic Base



Figure 2: Regional Vicinity Map Topographic Base
Empire Design Group, Inc, Northwest Commercial Center
MSHCP Habitat Assessment for the Burrowing Owl

Figure 3. Project Site

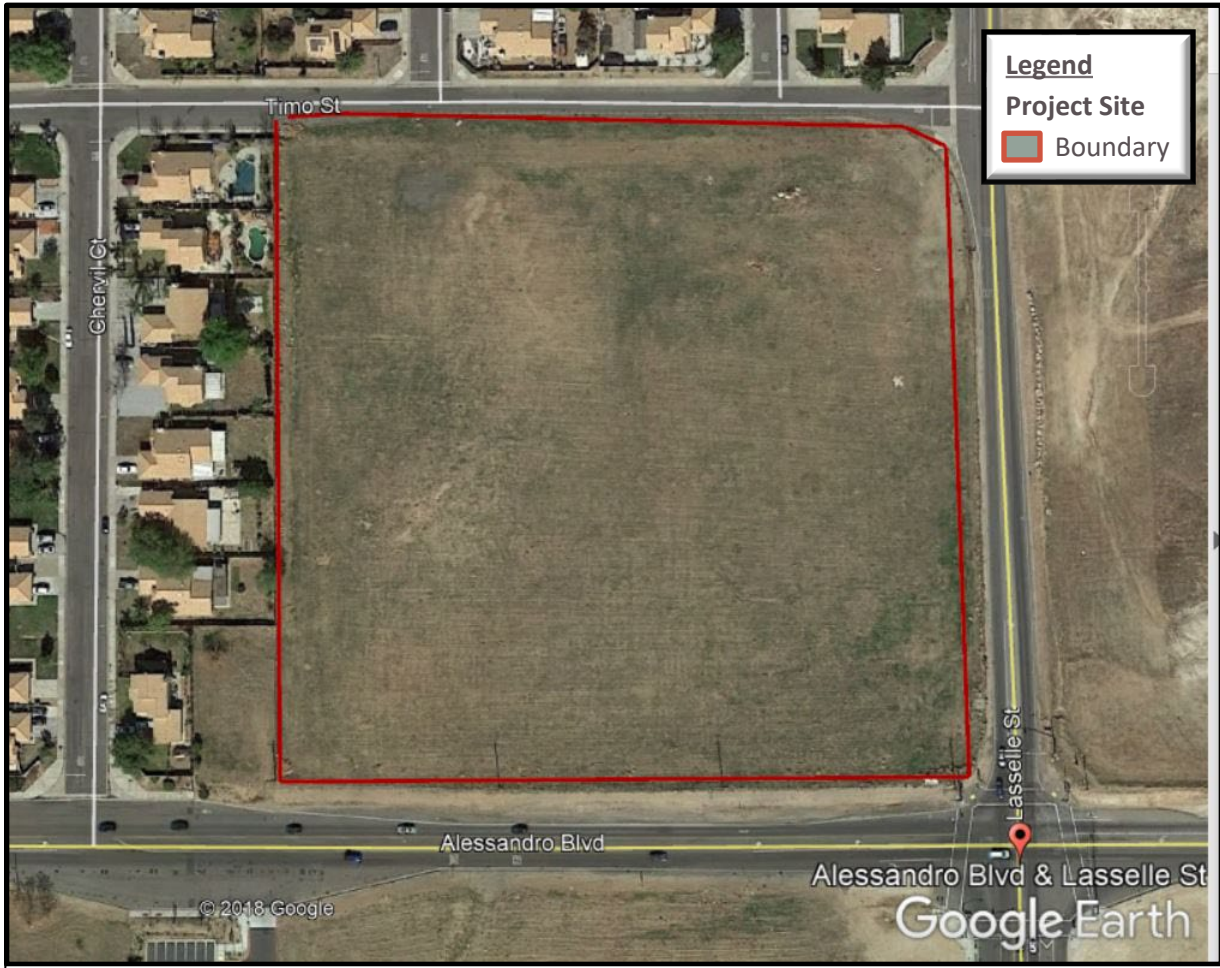


Figure 3: Project Site
Empire Design Group, Inc, Northwest Commercial Center
MSHCP Habitat Assessment for the Burrowing Owl

II. GENERAL BIOLOGICAL ANALYSIS

Literature Review

A compilation of sensitive biological resources, including the burrowing owl, was derived from the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDDB 2022) and the Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003). This information was used to help determine if sensitive resources were previously reported on or directly adjacent to the site. The literature review also included a review of field guides, web sites, and site plans provided by the Client.

Sensitive Resources

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, U.S. Fish and Wildlife Service (USFWS), and groups like the California Native Plant Society (CNPS) maintain special watch lists of such resources. Once the field survey was conducted, it was determined from several criteria, which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species.

Field Survey

This biological assessment focused primarily on conducting the burrowing owl habitat assessment on the entire 8.37 site. During the assessment, vegetation communities, adjacent land use(s) and detected plant and wildlife species were also documented. Typical habitats found throughout the project site were photographed for reference (Appendix A – Site Photos).

The site was surveyed by Senior Biologist, Kelly Rios, on April 8, 2022 between the hours of 0640 and 0815. The temperature 72°Fahrenheit; with clear skies, and winds of 1-2 miles per hour. The site was systematically surveyed by pedestrian transects starting from the northwest corner and ending in the northeast corner of the parcel. Transects were spaced to ensure 100 percent visual coverage. Ground squirrel burrows, if present, were thoroughly examined for presence of burrowing owl sign. All suitable perches were inspected for owl pellets and whitewash. Presence of burrowing owl was determined by direct observations and presence of sign, including pellets, white wash, feathers, or prey remains. The location of all suitable burrowing owl habitats, potential owl burrows, including suitable man-made structures that could support owls, burrowing owl sign, and any owls observed was recorded using a GPS unit.

RESULTS

Natural Communities

The site is heavily disturbed and has been previously graded and disked. The soils are hard packed and dominated by ruderal vegetation such as red-stemmed filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), red brome (*Bromus rubens*), and Saharan mustard (*Brassica tournefortii*). A few native plant species were observed on the project site that are considered “weedy” in nature such as telegraph weed (*Heterotheca grandiflora*), jimson weed (*Datura stramonium*), and fiddleneck (*Amsinkia* sp.).

The parcel is mostly flat with the exception of an asphalt debris pile and a rock pile in the northeast portion of the site.

Elevation on-site is approximately 483 feet above mean sea level. Surrounding land use consists of residential communities to the north and west and vacant lots to the south and east of the project site.

Wildlife

Bird activity was moderate during the survey. Avian species include species commonly found in urban communities and include Anna’s hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), Bewick’s wren (*Thryomanes bewickii*), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), Cassin’s kingbird (*Tyrannus vociferans*), and black phoebe (*Sayornis nigricans*). Also, a great egret (*Ardea alba*), which is common in aquatic areas, was observed standing in the central portion of the project site during the survey.

Inactive Botta’s pocket gopher (*Thomomys bottae*) burrows were observed near the rock and debris piles in the northeast portion of the site. Many of these old burrows were now collapsed and exposed holes in the ground. No California ground squirrel (*Otospermophilus beecheyi*) burrows were observed within the project site or surrounding vicinity.

III. BURROWING OWL HABITAT ASSESSMENT

Natural History of the Burrowing Owl

The burrowing owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. The burrowing owl is designated as a California species of concern due to its alarming decline in the state of over the past 30 years. Burrowing owls are not considered a long-lived species as they are subject to numerous avian predators (e.g. golden eagles, red-tailed hawks, and prairie falcons) and other causes of mortality including vehicle collisions, poisoning, feral animals, human persecution, diskings, and urban developments.

Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. Typical habitat associated with burrowing owls includes short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-round resident. Burrowing owls may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas, and irrigation ditches. Although open areas with short vegetation are critical for nesting, there is some evidence that the owls prefer a vegetation mosaic with nesting habitat interspersed with taller vegetation for hunting. However, the primary requirement for suitable burrowing owl foraging habitat appears to be low vegetation cover that allows visibility and access to prey.

In California, the species is often found in areas containing California ground squirrels and other burrowing animals, whose burrows are used by the owls. It is opportunistic in its use of burrow sites and can use pipes or other suitable cavities at or below ground level. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. One burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl. Burrowing owls are generally considered a monogamous species. Both parents take part in incubation for about 28 days. If left undisturbed, they will use the same burrow year after year for nesting. Clutches of up to 12 eggs are laid, primarily from February to May. The young emerge from the nest and spend daylight hours at the burrow entrance with one or both adults.

Results

Pedestrian surveys were walked across the entire project site. No California ground squirrel burrows were observed within or surrounding the project site. During a survey previously conducted in 2018 (Rios 2018), ground squirrel burrows were observed in the southcentral portion of the site as well as in the rock pile located in the northeast portion of the site. Special attention was made to these areas during the survey to look for any potential burrows and/or burrowing owl sign. There are no longer ground squirrel burrows located in either of these two areas. Ruderal vegetation and dirt had accumulated in between the rocks and at the base of the rocks where presumably the burrows would have been previously observed. Additionally, no burrowing owl sign, such as whitewash, pellets or feathers were observed near any of rocky outcrops.

Due to the lack of potential burrows or any burrowing owl sign located within project site, no focused surveys for burrowing owl are recommended.

Conclusion Statement

Implementation of this project while following the recommendations identified above will help reduce the potential for significant adverse impacts to those below a level of significance.

CERTIFICATION: *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Date: April 11, 2022

Signed:  _____

IV. REFERENCES

- Baldwin, B.G. (Editor) 2012. *The Jepson Manual: Higher Plants of California/ Second Edition*. University of Berkley Press. Berkley, California
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APPENDIX A

SITE PHOTOS

1. From northwest corner of the site, facing southeast



2. From southcentral boundary of site, facing north



3. From northeast boundary, facing west towards debris and rock piles



4. From northeast boundary, facing south with rock pile in foreground and debris pile in background



MSHCP Burrowing Owl Focused Survey Report

*Located in Section 8 of Township 3 South, Range 3 West
of the Sunnymead, CA USGS 7.5 minute Topographic Map
APN # 479631010*

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Survey Dates: June 25, July 10, 17, and 25, 2018

Report Date: August 2, 2018

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I. INTRODUCTION

This report describes the findings of focused surveys for burrowing owl (*Athene cunicularia*), conducted by Kelly Rios, Senior Biologist. The surveys were conducted to determine the presence/absence of burrowing owls within a MSHCP-designated burrowing owl survey area associated with the Plan Area. Before any form of construction can occur, the site must be clear of all species of special concern. This includes the burrowing owl. Due to the potential of burrowing owls to occur onsite, this survey was conducted to confirm the presence or absence of burrowing owls.

Project Site Location

The 8.37-acre project site (APN # 479631010), is located north of State Route (SR) 74, south of SR 60, west of SR 79, and east of Interstate 215 (Exhibit 1). The site location can also be described as being in Section 8 of Township 3 South, Range 3 West of the Sunnymead, CA USGS 7.5-minute topographic map (Exhibit 2). Specifically, the site is located at the northwest corner of Alessandro Boulevard and Lasselle Street, and bounded to the north by Timo Street (Exhibit 3).

Project Description

The proposed commercial center project consists of a fueling station, express carwash, fast-food, and retail space, as well as associated infrastructure, on a 3.37-acre portion of the 8.37-acre lot. The parcel is currently an undeveloped, disturbed lot.

Figure 1. Regional Vicinity Map, Aerial Base

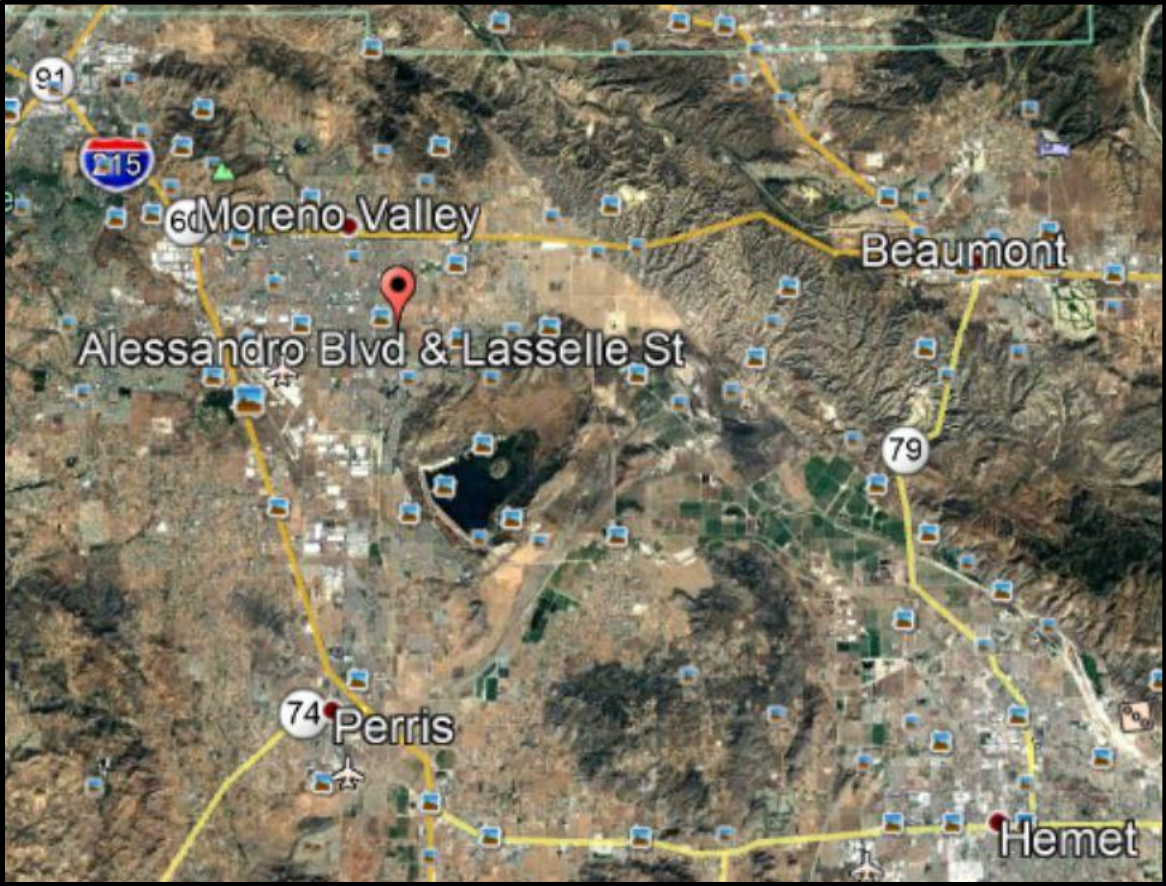


Figure 1: Regional Location Map
Sagecrest Planning+Environmental * Moreno Valley C-Story
MSHCP Focused Burrowing Owl Survey

Figure 2. Regional Vicinity Map, Topographic Base

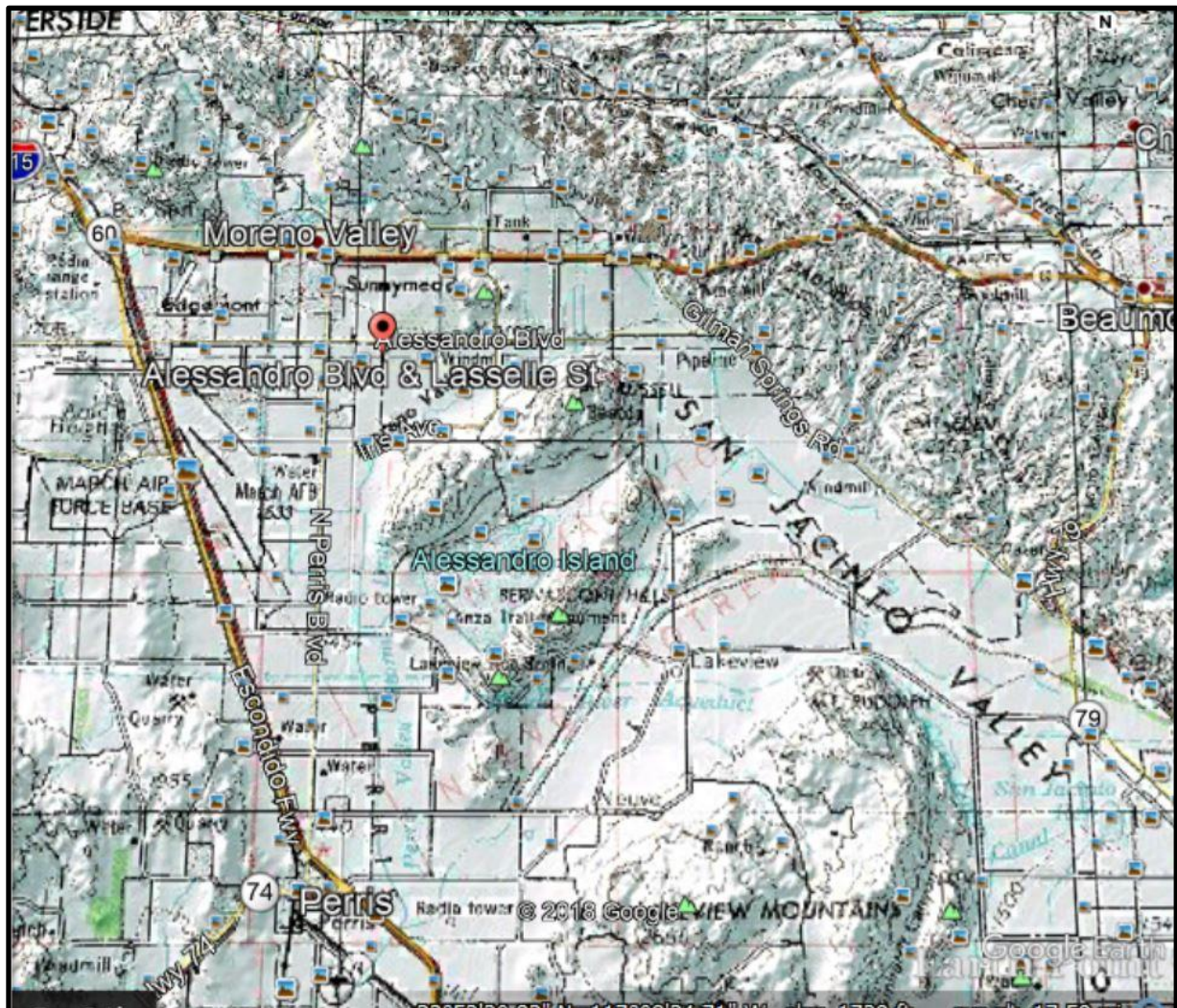


Figure 2: Regional Vicinity Map

Topographic Base

Sagecrest Planning+Environmental * Moreno Valley C-Story

MSHCP Focused Burrowing Owl Survey

Figure 3. Project Site

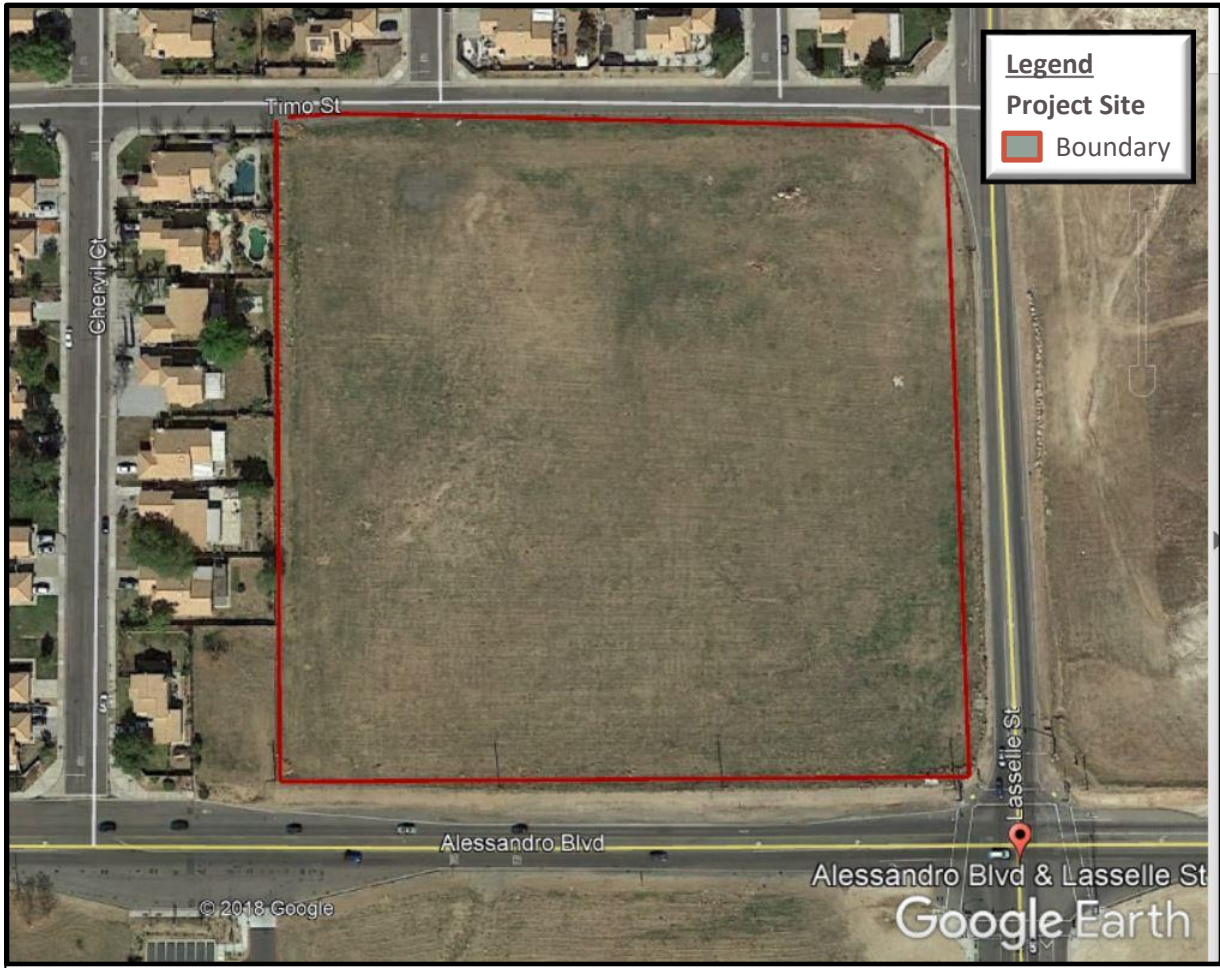


Figure 3: Project Site
Sagecrest Planning+Environmental * Moreno Valley C-Story
MSHCP Focused Burrowing Owl Survey

II. BACKGROUND

Natural History of the Burrowing Owl

The burrowing owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. The burrowing owl is designated as a California species of concern due to its alarming decline in the state of over the past 30 years. Burrowing owls are not considered a long-lived species as they are subject to numerous avian predators (e.g. golden eagles, red-tailed hawks, and prairie falcons) and other causes of mortality including vehicle collisions, poisoning, feral animals, human persecution, disking, and urban developments.

Burrowing owl require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. Typical habitat associated with burrowing owls includes short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-round resident. Burrowing owls may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas, and irrigation ditches. Although open areas with short vegetation are critical for nesting, there is some evidence that the owls prefer a vegetation mosaic with nesting habitat interspersed with taller vegetation for hunting. However, the primary requirement for suitable burrowing owl foraging habitat appears to be low vegetation cover that allows visibility and access to prey.

In California, the species is often found in areas containing California ground squirrels (*Spermophilus beecheyi*) and other burrowing animals, whose burrows are used by the owls. It is opportunistic in its use of burrow sites and can use pipes or other suitable cavities at or below ground level. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. One burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl. Burrowing owls are generally considered a monogamous species. Both parents take part in incubation for about 28 days. If left undisturbed, they will use the same burrow year after year for nesting. Clutches of up to 12 eggs are laid, primarily from February to May. The young emerge from the nest and spend daylight hours at the burrow entrance with one or both adults.

Western Riverside County MSHCP

The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan focusing on conservation of species and their associated habitats in western Riverside County. According to the MSHCP, surveys for the burrowing owl are to be conducted as part of the environmental review process. The MSHCP Additional Surveys Needs and Procedures (Section 6.3.2) identify a specific burrowing owl survey area within the MSHCP Plan Area (Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The MSHCP also identifies species-specific objectives for the burrowing owl surveys if suitable habitat occurs on a proposed project site.

Under the MSHCP, “if a site (including adjacent buffer areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat, and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.” If it is determined that the 90 percent threshold cannot be met, the Permittee(s) must submit a Determination of Biologically Equivalent or Superior Preservation (DBESP) to provide information on how the proposed plan would protect the nesting owls.

III. METHODS

Literature Review

Available documents and graphics regarding burrowing owl biology, habitat requirements, and previously mapped distribution within the Plan Area were reviewed. The literature review also included a review of field guides, web sites, and Geographic Information Systems (GIS) data. Section 8, References, lists the material reviewed for this report.

Focused Surveys

Kelly Rios conducted the focused burrow and burrowing owl surveys on the project site within all areas containing suitable habitat. Since the project site is vacant and surrounded by streets to the north, south and east and a residential development to the west, the entire 8.37-acre site was surveyed for burrowing owl; hereafter referred to as survey area. Focused surveys were conducted in accordance with survey protocols developed by the California Burrowing Owl Consortium (CBOC 1993) and the “Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area” (Riverside County 2006) per the Riverside County survey requirements. The area was surveyed to determine the suitable habitat areas consisting of low-growing vegetation, open areas for foraging, and availability of small mammal burrows.

Focused Burrow Survey

The survey for potential burrows and burrowing owl sign was conducted by walking through suitable habitat throughout the survey area by biologist Kelly Rios on June 25, 2018. Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines were no more than 100 feet and when necessary were reduced to account for differences in terrain, vegetation density, and ground surface visibility.

All suitable burrows were thoroughly examined for the presence of sign and suitable perches were inspected for burrowing owl pellets and whitewash. If occupied burrows or individual owls were observed during the survey, a minimum distance of 50 meters was maintained between owls or occupied burrows and the biologist, to minimize any potential harassment or disturbance.

Focused Burrowing Owl Survey

Following the results of the focused burrow survey, four additional focused burrowing owl surveys were conducted within the suitable habitat areas. Kelly Rios conducted the focused burrowing owl surveys on June 25, July 10, 17, and 25, 2018. The initial burrowing owl survey was conducted concurrently with the focused burrow survey on June 25, 2018. Only areas identified in the initial survey as having potential burrows and adjacent foraging habitat for owls were surveyed during the remaining three surveys (**Error! Reference source not found.**). The areas surveyed contained moderately suitable burrow habitat and were located generally in the northern and northwestern portion of the survey area.

IV. EXISTING CONDITIONS

Natural Communities

The site is heavily disturbed and has been previously graded and disked. Therefore, the site is dominated by ruderal vegetation. A few native plant species were observed on the project site that are considered “weedy” in nature such as western ragweed (*Ambrosia psilostachya*), telegraph weed (*Heterotheca grandiflora*), jimson weed (*Datura stramonium*), and Canadian horseweed (*Erigeron canadensis*). Additional non-native plant species observed on the site include Russian thistle (*Salsola tragus*) and short-pod mustard (*Hirschfeldia incana*).

The parcel is mostly flat the exception of an asphalt debris pile in the northwest corner of the site and a rock pile in the northeast portion of the site. Elevation on-site is approximately 483 feet above mean sea level. Surrounding land use consists of residential communities to the north and west and vacant lots to the south and east of the project site.

General Wildlife

The project site provides habitat for wildlife species that occur in disturbed/developed plant communities. No amphibian species were observed within the survey area during the focused surveys. Common wildlife species observed or detected include:

- American Crow (*Corvus brachyrhynchos*)
- Anna’s hummingbird (*Calypte anna*)
- Bushtit (*Psaltriparus minimus*)
- Common raven (*Corvus corax*)
- California towhee (*Melospiza crassalis*)
- House finch (*Carpodacus mexicanus*)
- Horned lark (*Eremophila alpestris*)
- Mourning dove (*Zenaidura macroura*)
- Northern Mockingbird (*Mimus polyglottos*)
- Western kingbird (*Tyrannus verticalis*)
- California ground squirrel (*Spermophilus beecheyi*)

Figure 4. USDA Soils Map

Legend
RaB2 -Ramona sandy loam
ChF2 - Cieneba sandy loam
RaA - Ramona sandy loam
VsD2 - Vista Coarse sandy loam

Figure 4: USDA Soil Map
Sagecrest Planning+Environmental * Moreno Valley C-Store
MSHCP Compliance Analysis and Focused Habitat Assessment for the Burrowing Owl

V. SURVEY RESULTS

Focused Burrow Survey

Biologist Kelly Rios conducted the initial focused burrow survey in conjunction with the first focused burrowing owl survey on June 25, 2018. The survey was conducted between 0545 and 0700 hours. Weather conditions during the survey included clear skies with an average temperature of 57 degrees Fahrenheit and winds of 1 to 2 miles per hour. There had been no recorded rain in the region for a minimum of 7 days prior to initiating the burrowing owl surveys. Several desert California ground squirrel burrows were observed in the concrete debris piles located in the northern portion of the survey area. No burrowing owl was observed within the survey area.

Focused Burrowing Owl Survey

Biologist Kelly Rios focused on portions of the survey area identified during the focused burrow survey that contain moderate potential habitat. The three focused burrowing owl surveys were conducted on July 10, 17, and 25, 2018. No burrowing owls, or evidence of burrowing owls, were observed during the burrowing owl survey. The weather data and results of each focused burrowing owl survey are summarized in **Table 1** below.

Table 1: 2018 Survey Results for Burrowing Owl

Survey Number	Date	Time	Temperature (Fahrenheit)	Percent Cloudy Skies	Results (# of owls observed)
1	June 25, 2018	0545 to 0700	57	Clear	Absent (0)
2	July 10, 2018	0600 to 0700	77	90	Absent (0)
3	July 17, 2018	0630 to 0730	70	80	Absent (0)
4	July 25, 2018	0630 to 0730	76	0	Absent (0)

VI. CONCLUSION AND RECOMMENDATIONS

No burrowing owls or sign of burrowing owl was observed within the survey area during the focused burrowing owl surveys. Therefore, burrowing owls are currently considered absent from the project site. However, due to suitable habitat within the project site, and the potential for burrowing owl to move onto the site during winter migration or during the next nesting season, a 30-day pre-construction clearance survey is recommended to ensure burrowing owls have not moved onto the site prior to ground disturbing activities.

If burrowing owls are located within the project site during the 30-day pre-construction clearance survey, direct impacts to burrowing owls must be avoided. Consultation with CDFW, the City of Moreno Valley, and / or the County of Riverside will be required to determine the best course of action to avoid any impacts to burrowing owls. Potential avoidance measures will include setting up a suitable buffer around the burrowing owl(s) and active nest and placing a biological monitor onsite to ensure no direct take occurs. No project activities may encroach into the buffer area without the consent of the biological monitor or until the nestlings have fledged.

Additionally, due to the presence of suitable nesting habitat for avian species known to occur in the region, a 30-day pre-construction clearance survey will be required if construction activities commence during the avian nesting season of February through August.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: August 2, 2018

Signed:



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VIII. REFERENCES

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