

Appendix B-2

Focused Burrowing Owl Survey Results

October 8, 2020

12761

Mr. Kevin Rice
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Subject: *Protocol Burrowing Owl Survey for the Perris Boulevard and Morgan Street Industrial Park Project, City of Perris, Riverside County, California*

Dear Mr. Rice:

This letter report documents the results of a focused presence/absence survey for the western burrowing owl (*Athene cunicularia hypugaea*) conducted within the approximately 16.3-acre project site located in the City of Perris, Riverside County, California. The focused survey was conducted to demonstrate consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which was required due to the project site's location within the MSHCP burrowing owl survey area and the presence of suitable habitat for the species. The survey was conducted within all suitable habitat within the project site and 500-foot buffer area (study area) to determine if western burrowing owl is present or absent from the study area.

1 Project Location

The proposed Perris Boulevard and Morgan Street Industrial Park project site is located in the City of Perris, in western Riverside County. Generally, the project site is located approximately 1 mile east of Interstate 215, and approximately 2 miles west of the Perris Reservoir (Attachment A: Figure 1). The L-shaped project site is bordered to the north by Morgan Street, to the east by Perris Boulevard, to the south and west by the industrial warehouse Building Material Distributors, and to the south by an undeveloped plot of land. The project site covers Assessor Parcel Numbers (APNs) 303-080-017, 303-080-007, and 303-080-018. A portion of the project site is within public land survey system (PLSS) Section 7 of Township 4 South, Range 3 West, within *Perris, CA* 7.5-minute U.S. geological Survey (USGS) topographic quadrangle.

1.1 Project Description

The project includes construction of four single industrial/warehouse buildings totaling approximately 316,496 square feet, inclusive of an office/mezzanine. Associated improvements include loading docks, truck and vehicle parking, and landscape areas.

2 Burrowing Owl Distribution, Biology, and Threats

Burrowing owl is a California Species of Special Concern due to their decline in the state of California in the last 30 years. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitat, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et

al. 1990). They can inhabit annual and perennial grasslands and scrublands characterized by low-growing vegetation. They may be found in areas that include trees and shrubs if the cover is less than 30%; however, they prefer treeless grasslands (Bates 2006). The presence of burrows is the most essential component of burrowing owl habitat as they are required for nesting, roosting, cover, and caching prey. In California, western burrowing owls most commonly live in burrows created by California ground squirrels. Burrowing owls may occur in human altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e. open and sparse), useable burrows are available, and foraging habitat occurs in close proximity (Gervais et al. 2008). Furthermore, debris piles, riprap, culverts, and pipes can be used for nesting and roosting. Reasons for their decline include habitat destruction, insecticide poisoning, rodenticide (particularly squirrel eradication programs), and shooting.

3 Methods

3.1 MSHCP Survey Requirements for the Western Burrowing Owl

According to the MSHCP, burrowing owl surveys are to be conducted for this project location as part of the environmental review process. The purpose of these surveys is to meet the conservation requirements of the MSHCP species-specific objective and to avoid direct mortality of the species. Surveys must be conducted following a three-step procedure: habitat assessment (Step I), focused surveys (Step II), and reporting (Step III).

The first step of the process requires a habitat assessment to determine if suitable habitat exists for burrowing owls. A qualified biologist(s) must walk the property to search for suitable habitat for burrowing owls. If suitable habitat is found, surveyors must search for suitable habitat within a 500-foot buffer around the property, by means of walking or binoculars. If the initial survey findings indicate suitable habitat is present on the property, focused surveys must be conducted.

The focused surveys are to be conducted in two parts. Part A focuses on surveying for suitable burrows and owl signs (white wash, feathers, track marks, pellets, prey remains), and Part B focuses on the presence/absence of burrowing owls. To survey for burrows and signs, the property should be walked in transects by a qualified biologist(s), keeping a distance of no more than 30 meters apart or at a distance such that surveyors have 100 percent visibility. Suitable burrows, owl signs, and owls, should be marked with GPS coordinates and mapped. If suitable burrows are found, then Part B of the focused surveys must be conducted.

If indicated, four additional surveys should be conducted focusing on surveying for burrowing owls. The first may be conducted concurrently with the Part A survey. Due to the diurnal nature of burrowing owls (Coulombe 1971), these four focused surveys must be conducted one hour prior to sunrise until two hours after or two hours prior to sunset until one hour after. Upon arrival on site, surveyors must scan the area where mapped suitable habitat has been determined with binoculars/spotting scopes for signs of burrowing owls. If any signs or owls are observed, they should be marked with a GPS and mapped. The focused surveys must be conducted during the breeding season (March 1st to August 31st) to accurately assess habitat use. In addition, weather conditions must be suitable and consist of temperatures of below 91°F, wind speeds under 20 miles per hour (mph), no rain, and no heavy fog.

Regardless of presence/absence results, a 30-day pre-construction survey needs to be conducted if suitable habitat exists.

3.2 Literature Review

To evaluate the natural resources found or potentially occurring within the study area, literature searches and database reviews were conducted by Dudek biologists. The database review included the most recent versions of the California Natural Diversity Database (CNDDB) and special-status species lists (CDFW 2020). This database was reviewed to identify sensitive biological resources present or potentially present for the USGS 7.5-minute topographic quadrangle on which the study area is located (Perris) and the eight surrounding quadrangles (Riverside East, Sunnymead, El Casco, Steele Peak, Lakeview, Lake Elsinore, Romoland, and Winchester). The Western Riverside County MSHCP was also reviewed prior to work in the field (County of Riverside 2003).

3.3 Field Surveys

Dudek biologist Rachel Swick conducted a habitat assessment and focused burrow survey on August 7, 2020 that identified suitable habitat for burrowing owls due to the presence of suitable vegetation and burrows. Focused burrowing owl surveys were also conducted by Dudek’s biologist on August 7, 14, 21, and 28 to confirm the presence/absence of burrowing owl within the study area. The weather conditions were within protocol limits, as shown in Table 1 below. Focused surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (Riverside County 2006). Per the protocol, surveys were conducted within two hours of sunrise to be able to observe burrowing owls when they are most active. Suitable habitat within the project site and a 500-foot buffer were surveyed for burrows, presence of sign, and individual owls. The location of all suitable burrowing owl habitat, potential owl burrows, including suitable man-made structures that could support owls, burrowing owl sign, and any owls observed were recorded and mapped with Collector. All observations during the surveys were recorded in a field notebook.

Table 1: Conditions for Focused Burrowing Owl Surveys

Date	Biologist	Survey Number	Time	Range of Conditions		
				Temperature Range in degrees Fahrenheit (°F)	Percent Cloud Cover (% cc)	Wind in miles per hour (mph)
August 7, 2020	RFS	1	0542 - 0749	55 - 61	0	0 - 1
August 14, 2020	RFS	2	0636 - 0743	72 - 79	0	0 - 1
August 21, 2020	RFS	3	0640 - 0747	75 - 81	0	0 - 1
August 28, 2020	RFS	4	0644 - 0752	72 - 74	0	0 - 1

3.3.1 Focused Burrow Survey

A systematic survey for potential burrowing owl burrows and burrowing owl sign was conducted by walking through all suitable habitat determined to exist within the project site and a 500-foot buffer surrounding the project site. The 500-foot buffer is included to account for any adjacent burrows and foraging habitat outside the project site in order to provide an adequate analysis of direct and/or indirect project related impacts related to loss of foraging

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habitat and/or noise and vibration due to heavy equipment use during the construction phase of the proposed project.

The survey focused on the entire project site; however, only a small, southern section of the 500-foot buffer was determined to have suitable habitat for burrowing owls. Areas excluded from surveys within the 500-foot buffer included areas to the north and west where large warehouses are located, the area east of the project site which contains a commercial center, and the area south of the project site which contains a warehouse. These areas were determined unsuitable for burrowing owl due to unfavorable terrain, lack of vegetation, disturbances, and lack of suitable burrows for this species.

Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 100 feet and when necessary was reduced to account for differences in terrain, vegetation density, and ground surface visibility.

All suitable burrows and perches were thoroughly examined for presences of sign (i.e. whitewash and pellets). 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 observer, to minimize any potential harassment or disturbance.

Attachment A: Figure 2 depicts the suitable burrowing owl habitat and potential burrows within the study area.

3.3.2 Focused Burrowing Owl Surveys

Following the focused burrow survey, four focused burrowing owl surveys were conducted to determine the presence or absence of burrowing owls within areas identified as suitable habitat during the focused burrow survey. The first focused burrowing owl survey was conducted concurrently with the focused burrow survey, in accordance with MSHCP burrowing owl survey protocol. The remaining three focused burrowing owl surveys were spaced a minimum of one week apart to allow for an adequate period of time to observe burrowing owls. The entire study area was surveyed during each of the focused surveys, with special attention paid to areas containing suitable burrows. Presence of owls was determined by direct observations and/or presence of sign, including pellets, white wash, tracks, feathers, and/or prey remains within the immediate vicinity of a suitable burrow. Survey methodology during the focused burrowing owl surveys was identical to the survey methodology for the focused burrow survey described above.

4 Existing Conditions

The project site is approximately 16.3-acres and has been previously disturbed by mowing and grading activities. Non-native grasses and ruderal (weedy) forbs dominate the vegetation on site. Four small slabs of concrete have been poured along the north edge of the project site. The north edge of the project site is lined with a row of eucalyptus (*Eucalyptus* sp.) trees that will not be removed during the proposed construction. The topography of the site is flat, with elevation ranging from approximately 1,455 feet above mean sea level (AMSL) on the east boundary to 1,465 feet AMSL on the west boundary. There is a storm drain inlet/outlet along the east edge of the project site that allows water from off-site locations to the west to flow under the project site, while also acting as a storm drain for the project site. Representative photographs of the project site are included in Appendix A.

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According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2020), the study area occurs within the Western Riverside Area (CA679). The study area is comprised of four types of soil: Exeter sandy loam (0 to 2 percent slopes), Exeter sandy loam, deep (0 to 2 percent slopes), Greenfield sandy loam (0 to 2 percent slopes), and Pachappa fine sandy loam (0 to 2 percent slopes). The surface soils observed within the study area have been significantly disturbed due to previous grading and other grounding disturbing activities.

4.1 Vegetation and Plant Communities

Dudek used CDFW's *List of Vegetation Alliances and Associations* (CDFW 2019), also referred to as the Natural Communities List, to determine vegetative communities within the study area. Vegetation communities and land covers were delineated to the vegetation alliance level, and where appropriate the association level based on *The Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens 2009). Some modifications, such as the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), and Oberbauer et al. (2008), were incorporated to accommodate the lack of conformity of the observed communities to those included in these references.

4.1.1 Disturbed Habitat

The disturbed or barren mapping unit refers to areas that lack vegetation but still retain a pervious surface, or that are dominated by a sparse cover of ruderal vegetation such as bristly ox-tongue (*Helminthotheca echioides*), stinknet (*Oncosiphon piluliferum*), shortpodded mustard (*Hirschfeldia incana*), and scattered non-native grasses such as wild oat (*Avena fatua*), and red brome (*Bromus rubens*). Additionally, a row of gum trees (*Eucalyptus* sp.) is located along the northern project boundary. The disturbed mapping unit is not recognized by the Natural Communities List (CDFW 2019) but is described by Oberbauer et al. (2008).

4.1.2 Developed Land

The developed mapping unit is not recognized by the Natural Communities List (CDFW 2019) but is described by Oberbauer et. al. (2008). Developed land typically includes areas that have been constructed upon and do not contain any naturally occurring vegetation. These areas that have been constructed upon and do not contain any naturally occurring vegetation. These areas are generally characterized as graded land with asphalt and concrete placed upon it. Developed areas mapped for the study area include several large manufacturing buildings, a parking lot, two roads, and a commercial center, all within the 500-foot buffer. No vegetation was observed within developed areas in the study area.

4.2 Wildlife

The project site consists predominantly of non-native grasses such as wild oat, and red brome, and is surrounded by commercial development. There is a row of gum trees along the northern edge of the project site. The vegetation found within the study area may support common wildlife species known to occur in upland and urban environments. The project site shows evidence of previous disturbances related to weed abatement activities, previous grading, and construction of several concrete slabs.

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Wildlife species diversity was limited during the four separate burrowing owl surveys. Bird species observed or detected included bushtit (*Psaltriparus minimus*), lesser goldfinch (*Spinus psaltria*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), and spotted towhee (*Pipilo maculatus*). One reptile species was observed, western fence lizard (*Sceloporus occidentalis*). No mammal, amphibian, or invertebrate species were observed within the study area.

5 Results

5.1 Focused Burrow Survey

The habitat assessment survey which identified suitable habitat for burrowing owl was conducted during the initial site reconnaissance level survey for the MSHCP Consistency Analysis. The initial focused burrow survey was conducted by Dudek biologist Rachel Swick on August 7, 2020, between 5:42am and 7:49am. Weather conditions during the survey were clear skies with an average temperature of 58 degrees Fahrenheit and winds of 0 to 1 mile per hour. There had been no rain in the region for a minimum of five days. Burrows were observed within the northern portion of the study area, particularly near the northeast corner of the project site, by the base of several eucalyptus trees. A potential burrow was also observed by the northwest corner of the project site, under a concrete slab. No evidence of active or previous burrowing owl use was found at any of the burrows.

5.2 Focused Burrowing Owl Surveys

Focused burrowing owl surveys were conducted throughout the study area within areas identified during the focused burrow survey as containing suitable habitat and burrows that could potentially support burrowing owl. No burrowing owl, or sign of burrowing owl occupancy was detected during any of the four focused burrowing owl surveys. Therefore, while suitable burrows were identified within the northern portion of the study area, no burrowing owls or signs of burrowing owl (i.e. pellets, whitewash, or feathers) were observed during the four focused surveys.

6 Conclusions

Due to the negative finding of burrowing owls during the four focused surveys, the project site and immediate vicinity are currently considered absent of any burrowing owls. However, due to the continued presence of suitable burrowing owl habitat on the project site and current lack of development on the site, there is a potential for burrowing owls to move onto the site prior to the start of construction. Therefore, a pre-construction clearance survey is required to determine the presence or absence of burrowing owls within 30 days prior to the start of construction, in accordance with the MHSCP 30-Day Burrowing Owl Survey protocol. If burrowing owl is observed on the study area during the pre-construction survey additional avoidance and minimization measures will be required to reduce potential impacts to burrowing owl. Measures include establishing an avoidance buffer, onsite monitoring, and passive relocation, if necessary.

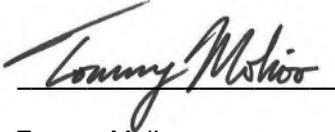
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Please feel free to contact me at 949.373.8321 or email at tmoloo@dudek.com with questions or requests for additional information.

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

Sincerely,



Tommy Molio
Sr. Biologist

Att.: A: *Figures*
B: *Site Photographs*
C: *Wildlife Compendium*

7 References Cited

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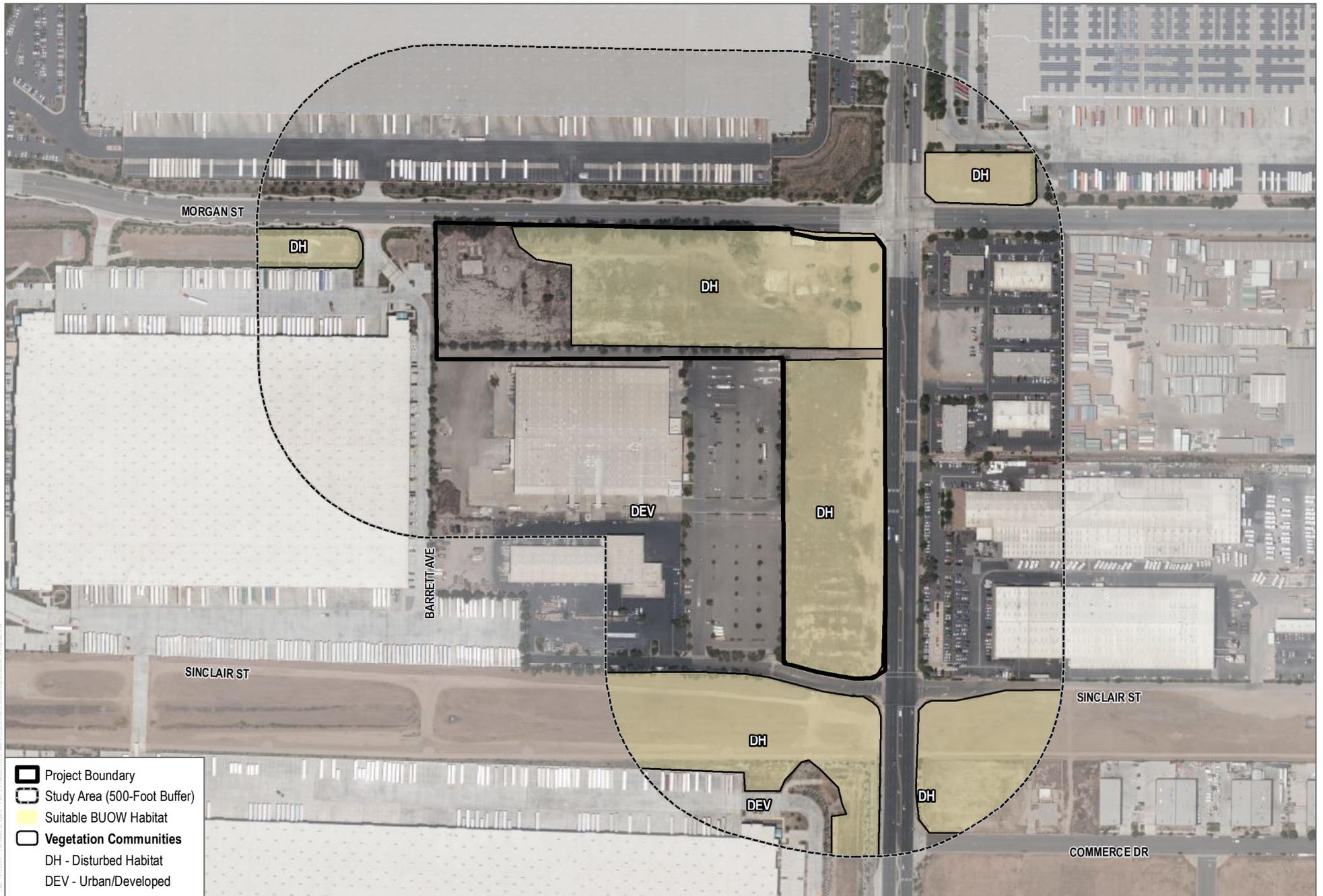
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Attachment A

Figures



SOURCE: Riverside County 2020; Bing Maps

FIGURE 2

Burrowing Owl Survey Map

Perris Boulevard and Morgan Street Industrial Park Project



Attachment B

Site Photographs



Photo 1: Potential burrowing owl (BUOW) burrow located in the northeast corner of the project site. Slightly small for BUOW burrow, and no bird sign seen around burrow.



Photo 2: Potential BUOW burrow located in the northeast corner of the project site. While large enough for BUOW, the burrow is located under a eucalyptus tree, reducing the likelihood of hosting a BUOW.



Photo 3: Potential BUOW burrow located in the northwest corner of the project site, under the corner of a cement block. Good size and location for BUOW burrow; however, no bird sign was seen around burrow.



Photo 4: Representative of the disturbed habitat found within the study area. The study area is dominated by non-native grasses.



Photo 5: Center of project site facing north. Representative of the ruderal vegetation found on site, along with the row of eucalyptus trees along the northern edge of the project site.



Photo 6: Center of the project site facing west. Representative of the disturbed habitat found within the study area.



Attachment C

Wildlife Compendium

Wildlife

BIRD

BUSHTITS

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus - bushtit

FINCHES

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Spinus psaltria—lesser goldfinch

FLYCATCHERS

TYRANNIDAE – TYRANT FLYCATCHERS

Sayornis nigricans - black phoebe

HAWKS

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis - red-tailed hawk

JAYS, MAGPIES, AND CROWS

CORVIDAE – CROWS AND JAYS

Corvus brachyrhynchos - American crow

PIGEONS AND DOVES

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura - mourning dove

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS

Pipilo maculatus - spotted towhee