APPENDIX B3
FOCUSED BURROWING OWL SURVEY

Michael Baker INTERNATIONAL

We Make a Difference

June 28, 2023 JN 185973

CITY OF MENIFEE
Community Development Department
Attn: Fernando Herrera, Associate Planner
29844 Haun Road
Menifee, California 92586

RE: 2023 Burrowing Owl Survey Report for the DEV2022-023 Coronado Condos Project

Dear Mr. Herrera:

Michael Baker International (Michael Baker) conducted a focused burrowing owl (*Athene cunicularia*; BUOW) surveys for the above referenced project that is located on the approximately 6.5-acre parcel in the City of Menifee, Riverside County, California (the project site). The project site occurs in the Burrowing Owl Survey Area, as designated by the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP). In accordance with Section 6.3.2, Additional Survey Needs and Procedures, of the WRMSHCP, focused surveys for burrowing owl are required if suitable habitat occurs on the project site to confirm the presence of burrowing owls prior to development. Based on a review of aerial photographs and knowledge of the project site, potentially suitable habitat for BUOW is present. As a result, focused surveys for burrowing owls were conducted in accordance with the WRMSHCP accepted protocols. This report includes the methods, results, and conclusion and recommendations for future actions based on the survey results.

PROJECT LOCATION

The project site is generally located south of Thornton Avenue, east of Upper Crest Drive, north of Esther Lane, and west of Murrieta Road in the City of Menifee, Riverside County, California (Attachment A, Figure 1). The project site is depicted in Section 20 of Township 5 South, Range 3 West, on the United States Geological Survey's (USGS) *Romoland, California* 7.5-minute quadrangle map. Specifically, the 6.5-acre project site is located at Assessor's Parcel Numbers 335-440-001 and 335-440-002.

PROJECT DESCRIPTION

The project site is located within a developed portion of the City of Menifee. The project site is an undeveloped parcel characterized by relatively flat terrain. Elevations range from approximately 1,446 to 1,463 feet above mean sea level. The project site is characterized by disturbed land cover that is dominated by ruderal/weedy, low-growing plant species. Natural

40810 County Center Drive, Suite 200 | Temecula, CA 92591
Office: 951-506-2036

vegetation communities have been eliminated due to routine weed abatement activities (i.e., disking, tilling). Based on a review of Google Earth Pro historical aerial imagery (Google, Inc. 2023), the project site and immediately surrounding area has been managed for weed abatement (i.e., disking, tilling) since at least 2002, resulting in heavily disturbed and compacted soils. One flood control facility (Hillman Street Storm Drain), which is maintained by the Riverside County Flood Control and Water Conservation District, occurs in the southwest portion of the project site. Surrounding land uses consist of a mixture of residential developments, commercial businesses, and disturbed open spaces.

Representative site photographs of the project site are included in Attachment B.

METHODS

Literature and Data Review

Michael Baker conducted a literature and data search of burrowing owl records from a 5-mile radius in the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CNDDB; CDFW 2023) and eBird database (eBird 2023). Other sources reviewed included available biological survey reports from the region, the Western Riverside County Regional Conservation Authority's (RCA) online MSHCP Information Map (RCA 2023), and the burrowing owl species account in the WRMSHCP (County of Riverside 2003).

Focused Survey

Michael Baker biologists conducted a two-step focused survey following the *MSHCP Burrowing Owl Guidelines* (2006). The two-step method required a focused burrow survey and focused burrowing owl survey. Each step is described below.

A) Focused Burrow Survey: A systematic survey for potentially suitable burrows, burrow complexes, or man-made features (i.e., debris piles) that could be used by burrowing owl as nest structures was conducted on foot. Potentially suitable burrow features were mapped using GPS-capable equipment. Burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. The location of suitable habitat, potential burrows, sign, and burrowing owls observed were recorded and mapped. Methods to detect presence of burrowing owls included direct observation, aural detection, and signs of presence. Due to the presence of suitable burrow sites, the first focused burrowing owl survey (described in B below) was conducted concurrently.

B) Focused Burrowing Owl Survey: Four site visits were conducted on four separate days during the breeding season (March 1 through August 31). Surveys were conducted from one (1) hour before sunrise to two (2) hours after sunrise or two (2) hours before sunset

to one (1) hour after sunset to maximize detection of burrowing owls. All surveys were conducted during weather conditions conducive to detecting burrowing owls outside of their burrows (e.g., not during rain, high winds (greater than 20 miles per hour), dense fog, temperatures over 90°F). Walking transects will be spaced approximately 10 meters (33 feet) apart or less to ensure 100% visual coverage of the survey area. Binoculars will be used in areas that are inaccessible on foot, with more complete, thorough coverage within the proposed project site. Areas providing suitable habitat for burrowing owls will be surveyed consisting of natural and non-natural substrates in areas with low, open vegetation within the project site.

The biological survey area (BSA) included the project site and a 500-foot buffer. Since Michael Baker did not have permission to access the adjacent parcels, observations were made using binoculars from legally accessible road right-of-way. Wildlife species detected during the field surveys by sight, calls, scat, or other types of sign were recorded in a field notebook. Field guides used to assist with identification of species during the field survey included The Sibley Guide to Birds (Sibley 2014) for birds. Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Society's *Check-list of North American Birds* (Chesser et al. 2022). Michael Baker's Geographic Information Systems (GIS) ArcGIS software was used to digitize the mapped resources onto an aerial photograph.

Table 1 provides a summary of the survey dates, surveyors, times, and weather conditions for each survey.

TABLE 1. SUMMARY OF SURVEYS

Survey	Date	Biologist	Time	Conditions (temperature/wind/CC)
Burrow Survey, BUOW Survey #1	05/25/23	AJ, RH	0530 – 0700	54°F, 0-2 mph, 90% cc
BUOW Survey #2	06/01/23	RH, SM	0530 – 0715	55-56°F, 0-2 mph, 90% cc
BUOW Survey #3	06/08/23	AJ, GC	0530 – 0645	65°F, 0-1 mph, 100% cc
BUOW Survey #4	06/16/23	AJ, SM	0530 – 0700	66°F, 1-2 mph, 100% cc

Biologists: AJ-Anna Jullie, GC-Geoffrey Chan, RH-Ryan Henry, SM-Samantha Martinez
Conditions: °F-Fahrenheit; mph-miles per hour; CC-cloud cover

RESULTS

Literature and Data Review

Based on a review of the CNDDB (CDFW 2023), a total of 46 BUOW occurrence records have been documented in a 5-mile radius of the project site. The closest extant occurrence (Occurrence Number 442) was recorded in 2002, approximately 0.3 mile west of the project site, where one pair was detected along Valley Boulevard (CDFW 2023). In addition, based on a review of the eBird database from within the last 10 years, there are a variety of BUOW records to the south of the project within a 5-mile radius, the closest of which is a recurring record of one to four BUOW approximately 2.0 miles to the south at the Menifee Water Treatment Ponds between 2012 and 2020 (eBird 2023).

Based on a review of the RCA's online WRMSHCP Information Application (RCA 2023), the entire project site occurs in the WRMSHP-designated Burrowing Owl Survey Area.

Focused Surveys

No BUOW or sign (i.e., pellets, white wash, feathers, or prey remains) were observed during any of the four focused surveys. Suitable foraging and open line of site habitat, as well as suitable burrows capable of providing roosting and nesting opportunities for BUOWs were detected within the BSA. A total of four suitable burrows (greater than four inches in diameter) were observed in the BSA during the focused burrow survey (Attachment B, Figure 2). The burrows occur along the western boundary of the project site. Potentially suitable habitat also occurs immediately south and to the east of the project site. On-going disturbances in the BSA, primarily from human presence, pets, and vehicular traffic, have reduced the potential for BUOW to occur. Additionally, eucalyptus trees that occur adjacent to the project site and in the eastern portion of the BSA provide perching and hunting opportunities for natural predators of the species (e.g., red-tailed hawk [*Buteo jamaicensis*]), which further decrease the likelihood BUOW occupy the BSA. During the surveys, adult and juvenile red-tailed hawks were observed in these eucalyptus trees and further east of the project site.

A total of twenty-five (25) wildlife species were observed in the BSA during the focused surveys, including twenty-one (21) bird species, three (3) mammal species, and one (1) reptile species. Commonly detected bird species during the focused surveys included mourning dove (*Zenaida macroura*), Costa's hummingbird (*Calypte costae*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*). A complete list of plant species detected during the focused surveys is provided in Attachment C.

CONCLUSIONS AND RECOMMENDATIONS

No BUOW, sign, occupied burrows, or remnant BUOW burrows were observed in the BSA. Therefore, BUOW is presumed to be absent from the project site and project-related activities are not expected to result in any direct or indirect impacts to BUOWs or occupied burrows.

Although BUOW was not observed during the focused surveys, the BSA supports suitable habitat that could become occupied by BUOW prior to implementation of the proposed project. Therefore, in compliance with the *MSHCP Burrowing Owl Guidelines* (2006), a pre-construction clearance survey is required to reconfirm the absence of BUOW and maintain compliance with the MBTA and CFGC. The pre-construction clearance survey needs to be conducted no more than 30 days prior to initiating vegetation removal or ground disturbing activities to avoid direct take of BUOW. Results of the one-time survey should be provided in a technical letter report and submitted to the City of Menifee for review and file.

If no BUOW or occupied burrows are detected, project activities may begin, and no additional BUOW avoidance or minimization measures would be required. However, if an occupied burrow is found in the project impact area during the pre-construction clearance survey, a BUOW avoidance and minimization plan and Determination of Biologically Equivalent or Superior Preservation analysis would need to be prepared and submitted to the Wildlife Agencies (CDFW and USFWS) for approval prior to initiating project activities

Please do not hesitate to contact me at (949) 812-8968 or ryan.henry@mbakerintl.com should you have any questions or require further information.

Sincerely,

Ryan Henry
Natural Resources Manager

Anna Jullie
Biologist

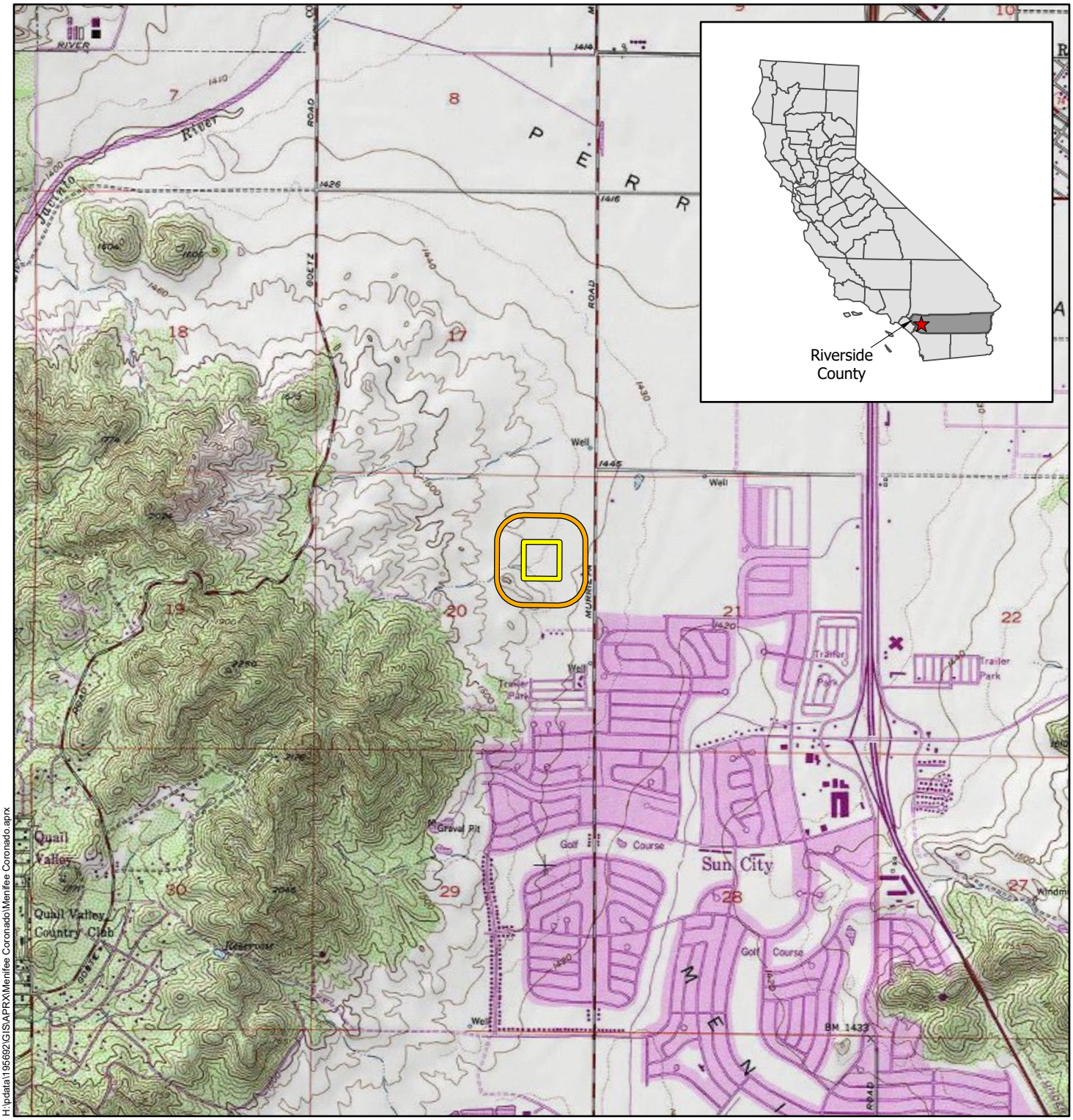
Attachments:

- Attachment A. Figures
- Attachment B. Site Photographs
- Attachment C. Species Compendium
- Attachment D. References

Michael Baker
INTERNATIONAL

ATTACHMENT A.
FIGURES

This page intentionally left blank



Legend

- Project Site
- Biological Survey Area (500-Foot Buffer)

Michael Baker INTERNATIONAL

0 0.25 0.5 Miles

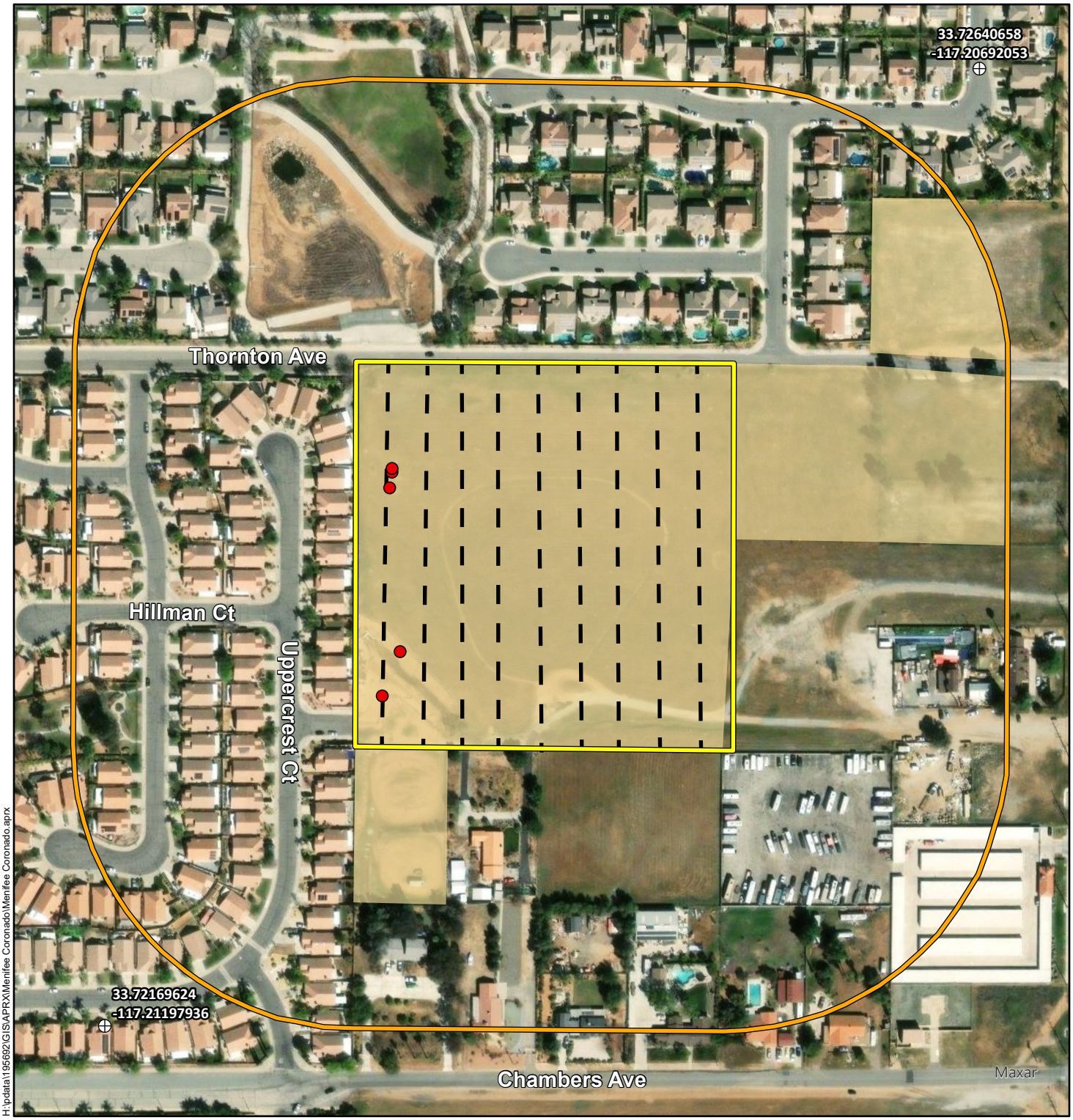
Source: Esri, ArcGIS Online, National Geographic World Map: *Menifee, California*

DEV2022-23 CORONADO CONDOS
2023 BURROWING OWL SURVEY REPORT

Regional Vicinity

Figure 1

(insert figures)



Legend

- Project Site (10.57 acres)
- Biological Survey Area (500-Foot Buffer)
- Reference Point
- Suitable Habitat (16.27 acres)
- Suitable Burrows
- Survey Transects

Michael Baker INTERNATIONAL

0 125 250 Feet

Source: Esri, ArcGIS Online, 2023 Nearmap Imagery: *Menifee, California*

DEV2022-23 CORONADO CONDOS
2023 BURROWING OWL SURVEY REPORT

Survey Results

Figure 2

This page intentionally left blank

Michael Baker
INTERNATIONAL

ATTACHMENT B.
SITE PHOTOGRAPHS

This page intentionally left blank

Photograph 1: View looking southeast from northwest corner of the project site.

Photograph 2. Potentially suitable burrow for burrowing owl.

Photograph 3: View looking west from northeast portion of the project site.

Photograph 4: View looking west from eastern portion of the project site.

Photograph 5: View looking northwest of Hillman Street Storm Drain from southwest portion of the project site.

Photograph 6: View looking northeast from south-central portion of the project site.

Photograph 7: View looking northeast of offsite parcel located north of Thornton Avenue.

Photograph 8: View looking south from Thornton Avenue at offsite stand of eucalyptus trees.

(insert photographs)

Michael Baker
INTERNATIONAL

ATTACHMENT C.
SPECIES COMPENDIUM

This page intentionally left blank

Table C-1: Wildlife Species

Scientific Name	Common Name	Special-Status Rank**
Birds		
Anas platyrhynchos	Mallard	-
Buteo jamaicensis	red-tailed hawk	-
Calypte anna	Anna's hummingbird	-
Calypte costae	Costa's hummingbird	-
Cathartes aura	turkey vulture	-
*Columba livia**	rock dove	-
Corvus brachyrhynchos	American crow	-
Corvus corax	common raven	-
Haemorhous mexicanus	house finch	-
Melozone crissalis	California towhee	-
Mimus polyglottos	northern mockingbird	-
Passer domesticus	house sparrow	-
Psaltriparus minimus	bushtit	-
Sayornis nigricans	black phoebe	-
Sayornis saya	Say's phoebe	-
Spinus psaltria	lesser goldfinch	-
*Streptopelia decaocto**	Eurasian collared dove	-
Thryomanes bewickii	Bewick’s wren	-
Tyrannus vociferans	Cassin's kingbird	-
Zenaida macroura	mourning dove	-
Zonotrichia leucophrys	white-crowned sparrow	-
Mammals		
Canis latrans	coyote	-
*Canis lupus familiaris**	domestic dog	-
Sylvilagus audubonii	desert cottontail	-
Reptiles		
Pituophis catenifer	gopher snake	-

* Non-native species

(insert species list)

Michael Baker
INTERNATIONAL

ATTACHMENT D.
REFERENCES

This page intentionally left blank

CDFG (California Department of Fish and Game). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency: 34 pp

CDFW (California Department of Fish and Wildlife). 2023. California Natural Diversity Data Base, RareFind 5, Version 5.2.14. Sacramento, California: CDFW, Biogeographic Data Branch. Available at https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed May 2023.

Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, B. E. Hernández-Baños, R. A. Jiménez, A. W. Kratter, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. 2022. Check-list of North American Birds (online). American Ornithological Society. https://checklist.americanornithology.org/.

County of Riverside. 2003. Western Riverside County Multiple Species Habitat Conservation Plan. County of Riverside, Transportation and Land Management Agency, Riverside County Integrated Project. MSCHP adopted June 17, 2003. Available at https://rctlma.org/epd/WR-MSHCP.

eBird. 2023. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Accessed online at: http://www.ebird.org

ECORP (ECORP Consulting, Inc.). 2022. Results of Protocol-Level Focused Burrowing Owl Surveys at the Menifee 91 Residential Development Project in Menifee, California. Prepared for JPMB Investments, LLC.

NOAA (National Oceanic and Atmospheric Administration). 2023. National Weather Service Climate Data – Riverside Area (Monthly Total Precipitation). Available at https://www.weather.gov/wrh/Climate?wfo=sgx.

RCA (Regional Conservation Authority). 2023. RCA MSHCP Information Map. Available at: https://wrcrca.maps.arcgis.com/apps/webappviewer/.

RCA. 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Accessed online at: https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.