

APPENDIX D

Habitat Assessment and Burrowing Owl Focused Survey
Results, RECON Environmental, Inc.



An Employee-Owned Company

May 11, 2022

Mr. Joe Broadhead
Principal Water Resource Specialist
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572

Reference: Habitat Assessment and Burrowing Owl Focused Survey Results at Steeplechase Booster Pump Station Project (RECON Number 9295.16)

Dear Mr. Broadhead:

This letter summarizes the results of the 2022 focused surveys for the burrowing owl (*Athene cunicularia*) conducted within the Steeplechase Booster Pump Station Project (project area; Assessor Parcel Numbers 474660025, 474660026, 474170016, 474171016, 474171015, 474171014, 474110014, 474675015, 474675016, 474675017, 474671001, 474170002, 474170009, 474200014, 474170004, 474170008, 474180013, 474675013, 474675014, 474675022, 474675021). The project area is in the city of Moreno Valley, in western Riverside County, California (Figures 1 through 3). The project area is in the U.S. Geological Survey (USGS) Sunnymead quadrangle, Township 2 South, Range 3 West (USGS 1980; see Figure 2).

A RECON biologist conducted focused burrowing owl surveys during the species' breeding season (March 1–August 31) in suitable habitat in accordance with the guidelines developed by the County of Riverside (Riverside County Transportation and Land Management Agency [RCTLMA] 2006). Step I, Step II–Part A, and Step II–Part B were conducted to determine the presence or absence of this species. For the purposes of this report, the “survey area” includes the project’s proposed ground disturbance footprint (project area) and a 500-foot buffer (Figure 4). No burrowing owl individuals or any sign of burrowing owl activity were detected within the survey area. A discussion of the results of the survey conducted is provided below.

Survey Methods

RECON Environmental, Inc. biologist Alex Fromer conducted burrowing owl surveys in accordance with the guidelines developed by the County of Riverside (RCTLMA 2006). Surveys included a habitat assessment (Step I), a focused burrow survey (Step II, Part A), and four focused burrowing owl surveys (Step II, Part B). Meandering transects were walked through all suitable habitat identified within the project area and 500-foot buffer. All wildlife species observed during the surveys were noted. Survey dates, times, and weather conditions are provided in Table 1.

Table 1 Survey Information				
Date	Survey Type	Surveyors	Beginning Conditions	Ending Conditions
2/4/2022	Step I Habitat Assessment	A. Fromer	9:45 a.m.; 58°F; 0–1 mph; <5% cc	11:25 a.m.; 58°F; 3–5 mph; <5% cc
3/3/2022	Step II–Part A Burrow Survey Step II–Part B Owl Survey #1	A. Fromer	5:45 a.m.; 53°F; 0–1 mph; 50% cc	8:10 a.m.; 64°F; 1–3 mph; 30% cc

Table 1 Survey Information				
Date	Survey Type	Surveyors	Beginning Conditions	Ending Conditions
3/9/2022	Step II–Part B Owl Survey #2	A. Fromer	6:05 a.m.; 44°F; 0–1 mph; 0% cc	8:05 a.m.; 48°F; 0–3 mph; 0% cc
3/16/2022	Step II–Part B Owl Survey #3	A. Fromer	6:50 a.m.; 45°F; 0–1 mph; 0% cc	8:50 a.m.; 56°F; 0–2 mph; 0% cc
3/23/2022	Step II–Part B Owl Survey #4	A. Fromer	6:45 a.m.; 63°F; 0–1 mph; 0% cc	8:45 a.m.; 71°F; 0–1 mph; 0% cc
°F = degrees Fahrenheit; mph = miles per hour; % = percent; cc = cloud cover				

Habitat Assessment (Step I) Results

Existing Conditions

A burrowing owl habitat assessment was conducted for the project on February 4, 2022. The survey area is situated within residential development with an area of undeveloped land in the eastern portion of the survey area (see Figure 4). Five soil types occur within the project area: Hanford loamy fine sand, Hanford coarse sandy loam, Moserate sandy loam, Ramona sandy loam, and terrace escarpments (U.S. Department of Agriculture 2022). Elevation range is approximately 1,910–1,990 feet above sea level.

Suitable Burrowing Owl Habitat

The survey area supports two vegetation communities/land cover types: disturbed habitat (31.1 acres), and urban/developed (56.7 acres) (see Figure 4). The urban/developed consists of paved roads and residential development including ornamental vegetation. The disturbed habitat in the eastern portion of the survey area is considered suitable habitat for burrowing owl and is discussed in further detail below.

The disturbed habitat is comprised of undeveloped land in the northwestern portion of the survey area and undeveloped lots or portions of private properties in the southwestern and southeastern portions of the survey area. The disturbed habitat in the northwestern portion of the survey area is dominated by common fiddleneck (*Amsinckia menziesii*) and appears to see frequent disturbance. Brome (*Bromus* sp.) and barley (*Hordeum* sp.) are also found throughout, with redstem filaree (*Erodium cicutarium*) also present. Small, sparse patches of brittlebush (*Encelia farinosa*) also exist within the central portion of this area that is predominantly comprised of open ground, with scattered to dense non-native weeds, native wildflowers, and low-lying annual grasses. This area of disturbed habitat also includes open areas created by off-road vehicles and access roads and a few soil and debris piles. Potential areas for burrows were investigated in sparsely vegetated areas in this area. The disturbed habitat in the southwestern and southeastern portions of the survey area are primarily comprised of open ground, with moderate to dense non-native weeds and low-lying annual grasses in addition to a large patch of bare ground within the southern portion of the project boundary.

Focused Burrow Survey (Step II, Part A) Results

A focused burrow survey was conducted concurrently with the first focused survey throughout the project area and within the 500-foot buffer, via binoculars. Small-mammal burrows were present throughout the non-native grassland and disturbed habitat (see Figure 4). Burrows are likely from California ground squirrel (*Spermophilus beechyi*), which was observed during the focused burrow survey and subsequent owl surveys.

Mr. Joe Broadhead
Page 3
May 11, 2022

No sign of active burrows used by burrowing owls were detected during the focused burrow survey. Although many burrows appeared to be the appropriate size and shape for burrowing owl use, many burrows appeared abandoned due to the presence of leaf litter, desiccated grass, and cobwebs. While some whitewash was present near a few burrows, most was found at higher perches than the burrows themselves and were likely signs of use by other avian species. No other sign, such as feathers, pellets, or bones, were observed within or adjacent to burrows.

Focused Burrowing Owl Surveys (Step II, Part B) Results

Focused burrowing owl surveys were conducted on four separate dates: March 3, 9, 16, and 23, 2022. All surveys were conducted between one hour before sunrise and two hours after sunrise. Meandering transects were walked through all suitable habitat identified within the project area and the majority of the 500-foot buffer. A small portion within the buffer in the southeastern portion of the survey area was surveyed using binoculars as no access was granted. No burrowing owls or significant whitewash, feathers, pellets, or bones were observed within or adjacent to burrows during these focused surveys.

Pre-construction Survey Requirement

A pre-construction survey will be required within 30 days prior to ground disturbance to ensure no burrowing owls have entered the area to avoid direct take of species and any active nests, if present. The survey will include all areas where suitable habitat is present within the survey area (RCTLMA 2006).

If you have any questions concerning the contents of this letter, please contact me at (619) 308-9333, extension 193.

Sincerely,

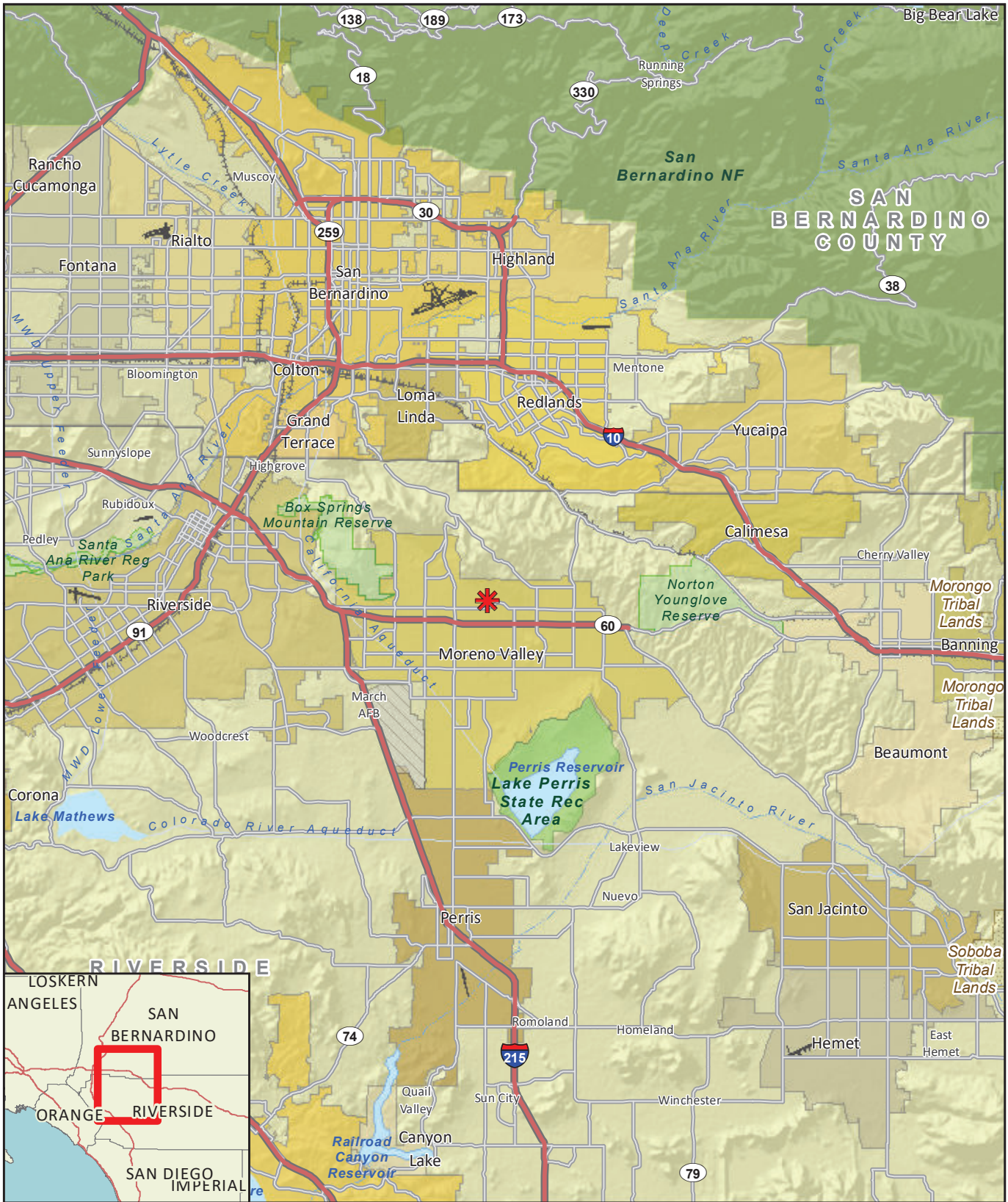


Alexander Fromer
Biologist

APF:jg

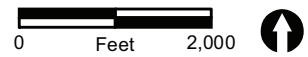
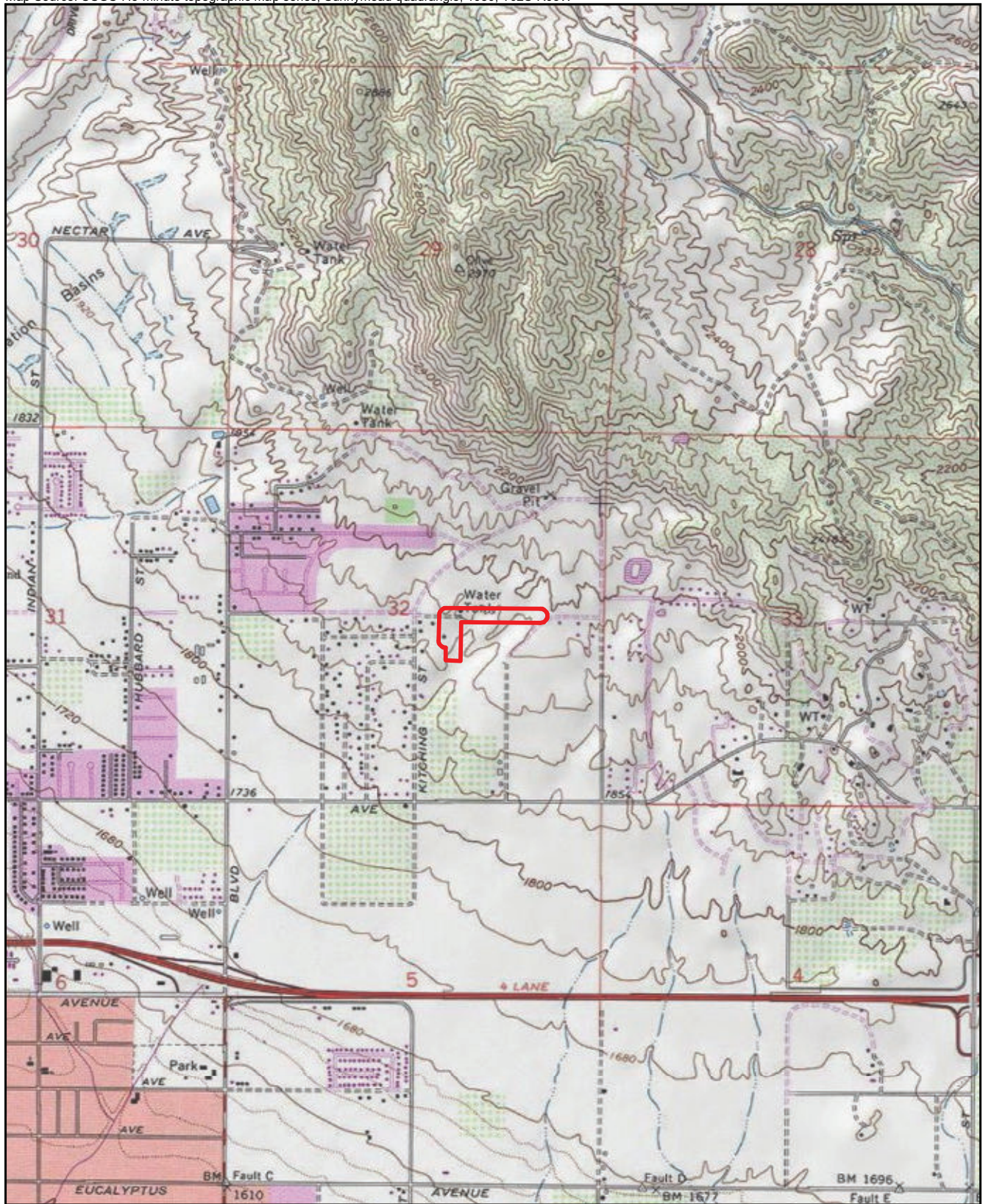
References Cited

- Riverside County Transportation & Land Management Agency (RCTLMA)
2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf
- U.S. Department of Agriculture
2022 Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.
- U.S. Geological Survey
1980 7.5-minute topographic map, Sunnymead, California quadrangle.



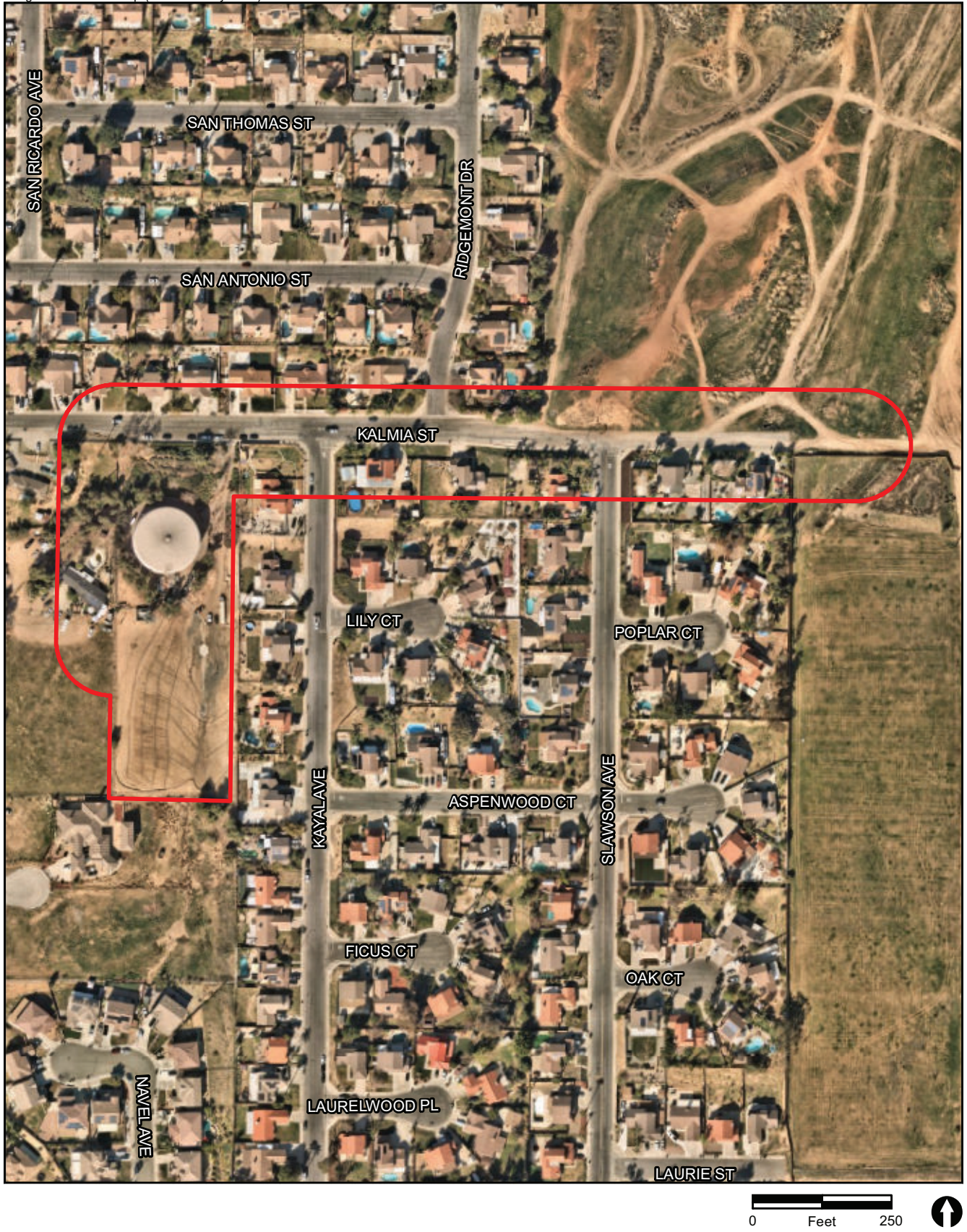
 Project Location

FIGURE 1
Regional Location



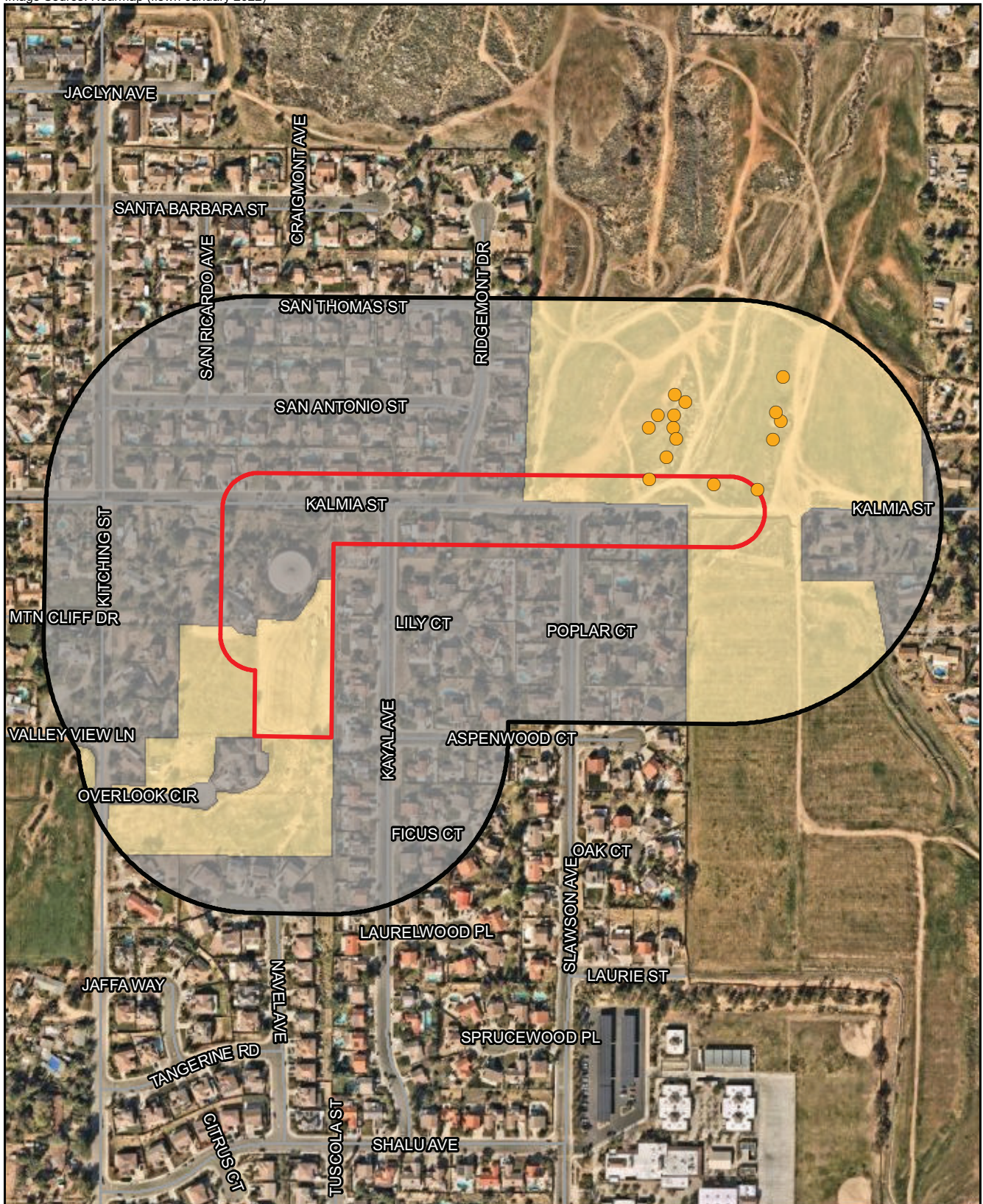
 Project Boundary

FIGURE 2
Project Location on USGS Map



 Project Boundary

FIGURE 3
Project Location on Aerial Photograph



- Project Boundary
- Survey Area
- Burrows
- Vegetation Community**
- Disturbed Habitat
- Urban/Developed

0 Feet 400



FIGURE 4
Existing Biological Resources