APPENDIX D4

Burrowing Owl Focused Survey Results

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September 27, 2022

Ms. Jennifer Brooks
DO Capital Group
484 S. San Vicente Boulevard
Los Angeles, CA 90048

Reference: Burrowing Owl Focused Survey Results for The District at Jurupa Valley Project (RECON Number 9949-1)

Dear Ms. Brooks:

This letter summarizes the results of the 2022 focused surveys for the burrowing owl (*Athene cunicularia*) conducted for The District at Jurupa Valley Project (project area; Assessor Parcel Numbers 178252003, 178252004, 178261001, 178261002, 178262001, 178262002, 178262003, 178262004, 178262005, 178262006, 178262007, 178262008, 178290005, 178290009, 178300001, 178300002, 178300003, 178300004, 178300005, 178300006, 178300007, 178300008, 178310001, 178310002, 178310004, 178310005, 178310006, 178310007, 178310008, 178310009, 178310011, 178310012, 178310013, 178310014, 178310015, 178310023, 178310024, 178310025, 178310026, 178310028, 178310031, 178310032, 178310041, 178310042, 178310044, 178310046, 178310051, 179130004, 179130006, 179130007, 179130008, 179170001, 179170003, 179170004, 179170005, 179170007, 179170008, 179170016, 179170018, 179170020, 179230010, 179270001, 179270011, 179270012, 179270013, 179270014, 179270015, 179270016, 179270017, 179270018, 179270024, 179270033, 179310001, 179310004, 179310005, 179340001, 179340002, 179340005, 178310033, and 179130003). The project area is in the city of Jurupa Valley, in Riverside County, California (Figures 1 and 2). The project area is in the Jurupa (Rubidoux) Land Grant area of the U.S. Geological Survey (USGS) Fontana and Riverside West quadrangles (USGS 1980; see Figure 2).

RECON Environmental, Inc. (RECON) biologists 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 (Western Riverside County Regional Conservation Authority [WRCRCA] 2006). Step I was conducted during general biological surveys by RECON biologists Alex Fromer, JR Sundberg, and Jade Woll. Potentially suitable burrowing owl habitat was identified throughout the survey area, therefore, 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 3). No burrowing owl individuals and no sign of active burrows used by burrowing owls were detected within the survey area. A discussion of the survey results is provided below.

Survey Methods

RECON biologists Alex Fromer, Jade Woll, and Chelsea Polevy conducted burrowing owl surveys in accordance with the guidelines developed by the County of Riverside (WRCRCA 2006). Surveys included a focused burrow survey (Step II–Part A) and four focused burrowing owl surveys (Step II–Part B). Due to the large size of the project area and 500-foot buffer (250 acres), the focused surveys were performed over the course of two or three sessions per survey and followed guidelines developed by the County of Riverside (WRCRCA 2006). Parallel transects were walked through all suitable habitat identified within the project area for both Step II-Part A and Step II-Part B to achieve 100 percent visual coverage of all suitable habitat. Representative habitat is depicted in Photographs 1 and 2. In general, the transects were no greater than 30 meters in width as the vegetation and terrain were open and fairly flat. The site includes several flat terraces supported by slopes as the site drops in elevation from the northwest to the southeast. In addition, some portions of the site were a little more uneven with debris piles and soil mounds that have been

deposited over the years. Lastly, there are earthen berms in the eastern portion of the site that run roughly north-south. Deviations to the transect width and/or survey pathways were made in order to visually inspect any areas that warranted additional survey effort, including areas with a greater density of burrows, areas supporting any mounded or dumped soil, the slopes supporting the terraces, and the berms located on the eastern edge of the site (see Figure 3.) This approach allowed for a 100 percent visual inspection of the suitable habitat on-site. Suitable habitat along the Santa Ana River levee was visually inspected where accessible and the remainder of suitable habitat within the 500-foot buffer was surveyed using binoculars, as access to private property was not granted. 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
12/16/21	Step I Habitat Assessment a	A. Fromer, J. Sundberg, J. Wall	10:00 a.m.; 56°F; 0-2 mph; 15% cc	3:40 p.m.; 58°F; 0-1 mph; 20% cc
12/17/21	Step I Habitat Assessment b	A. Fromer, J. Sundberg, J. Wall	8:15 a.m.; 56°F; 0-1 mph; 0% cc	12:00 p.m.; 69°F; 1-3 mph; 0% cc
6/28/22	Step II–Part A Burrow Survey and Step II–Part B Owl Survey #1a	A. Fromer, J. Woll, C. Polevy	6:50 p.m.; 90°F; 2-4 mph; 0% cc	9:05 p.m.; 85°F; 0-1 mph; 0% cc
6/29/22	Step II–Part A Burrow Survey and Step II–Part B Owl Survey #1b	A. Fromer, J. Woll, C. Polevy	4:40 a.m.; 65°F; 0-1 mph; 0% cc	7:40 a.m.; 76°F; 0-1 mph; 0% cc
7/5/22	Step II–Part B Owl Survey #2a	A. Fromer, J. Woll	6:45 p.m.; 83°F; 3-5 mph; 0% cc	8:55 p.m.; 76°F; 2-4 mph; 0% cc
7/6/22	Step II–Part B Owl Survey #2b	A. Fromer, J. Woll	4:45 a.m.; 64°F; 0-1 mph; 0% cc	7:40 a.m.; 64°F; 1-3 mph; <5% cc
7/6/22	Step II–Part B Owl Survey #2c	A. Fromer, J. Woll	6:05 p.m.; 86°F; 5-7 mph; 0% cc	9:00 p.m.; 81°F; 0-2 mph; 0% cc
7/12/22	Step II–Part B Owl Survey #3a	A. Fromer, J. Woll, C. Polevy	4:50 a.m.; 64°F; 0-1 mph; 0% cc	7:45 a.m.; 66°F; 1-2 mph; 0% cc
7/12/22	Step II–Part B Owl Survey #3b	A. Fromer, J. Woll, C. Polevy	6:05 p.m.; 86°F; 5-6 mph; <5% cc	9:00 p.m.; 74°F; 4-7 mph; <5% cc
7/13/22	Step II–Part B Owl Survey #4a	A. Fromer, J. Woll, C. Polevy	4:50 a.m.; 63°F; 0-1 mph; <5% cc	7:45 a.m.; 69°F; 0-1 mph; <5% cc
7/13/22	Step II–Part B Owl Survey #4b	A. Fromer, J. Woll, C. Polevy	6:30 p.m.; 90°F; 5-7 mph; <5% cc	8:55 p.m.; 76°F; 0-1 mph; 0% cc

°F = degrees Fahrenheit; mph = miles per hour; % = percent, cc = cloud cover.

Focused Burrow Survey (Step II, Part A) Results

A focused burrow survey was conducted concurrently with the first focused burrowing owl survey on June 28 and 29, 2022 to locate and map potentially suitable burrows. Areas within a 500-foot buffer of the project area that were inaccessible were surveyed using binoculars. Small-mammal burrows were present throughout the project area (see

Figure 3). The majority of these burrows are likely from California ground squirrel (*Spermophilus beechyi*), which was observed during the focused burrow survey and subsequent burrowing owl surveys (Photographs 3 and 4).

No sign of active burrowing owl burrows were detected during the focused burrow survey. Although many burrows appeared to be the appropriate size and shape for burrowing owl use, the majority of the burrows appeared abandoned due to the presence of leaf litter, desiccated grass, and cobwebs, or currently occupied by California ground squirrel. Whitewash, feathers, and bones were detected at three burrows along a slope in the northwestern portion of the project area; however, none of these seemed to be indicative of burrowing owl (see Figure 3 and Photographs 5-7). The whitewash was scattered above the burrow and to the sides in various locations with the deposits appearing too large for burrowing owl; the feathers appeared to be from other avian species; and the bones observed were larger than the typical small rodent bones that can be found in burrowing owl pellets. All of these burrows were either currently occupied by squirrels or were unoccupied, based on spiderwebs and deterioration. No other sign, such as pellets or decoration, was observed within or adjacent to the remainder of the burrows.

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

Four focused burrowing owl surveys were conducted on six separate dates: June 28 and 29 and July 5, 6, 12, and 13, 2022. All surveys were conducted between two hours before sunset and one hour after sunset and one hour before sunrise and two hours after sunrise. No burrowing owls were observed during these focused surveys.

Pre-construction Survey Requirement

Based on the presence of suitable habitat, a pre-construction survey will be required within 30 days prior to ground disturbance to ensure no burrowing owls have entered the site to avoid direct take of burrowing owls, if present. The survey will include all areas where suitable habitat is present within the survey area (WRCRCA 2006).

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

Sincerely,

Alex Fromer
Biologist

APF:CAP:sh

References Cited

U.S. Geological Survey (USGS)
1980 Fontana and Riverside West Quadrangles 7.5-Minute Topographic Map.

Western Riverside County Regional Conservation Authority (WRCRCA)
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.

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FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Fontana and Riverside West quadrangles, 1980, Jurupa (Rubidoux) Land Grant

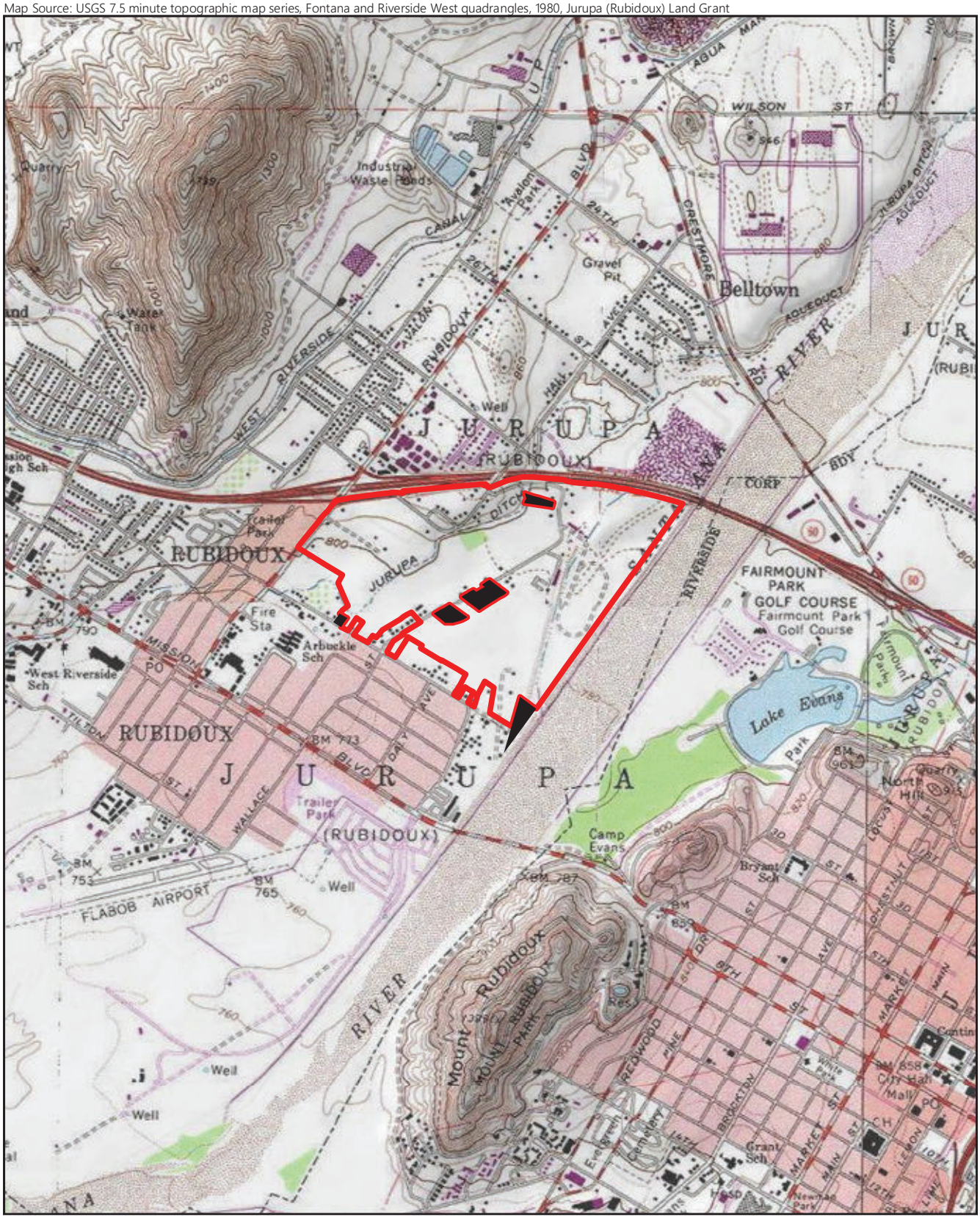

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FIGURE 2
Project Location on USGS Map

Image Source: NearMap (flown May 2022)

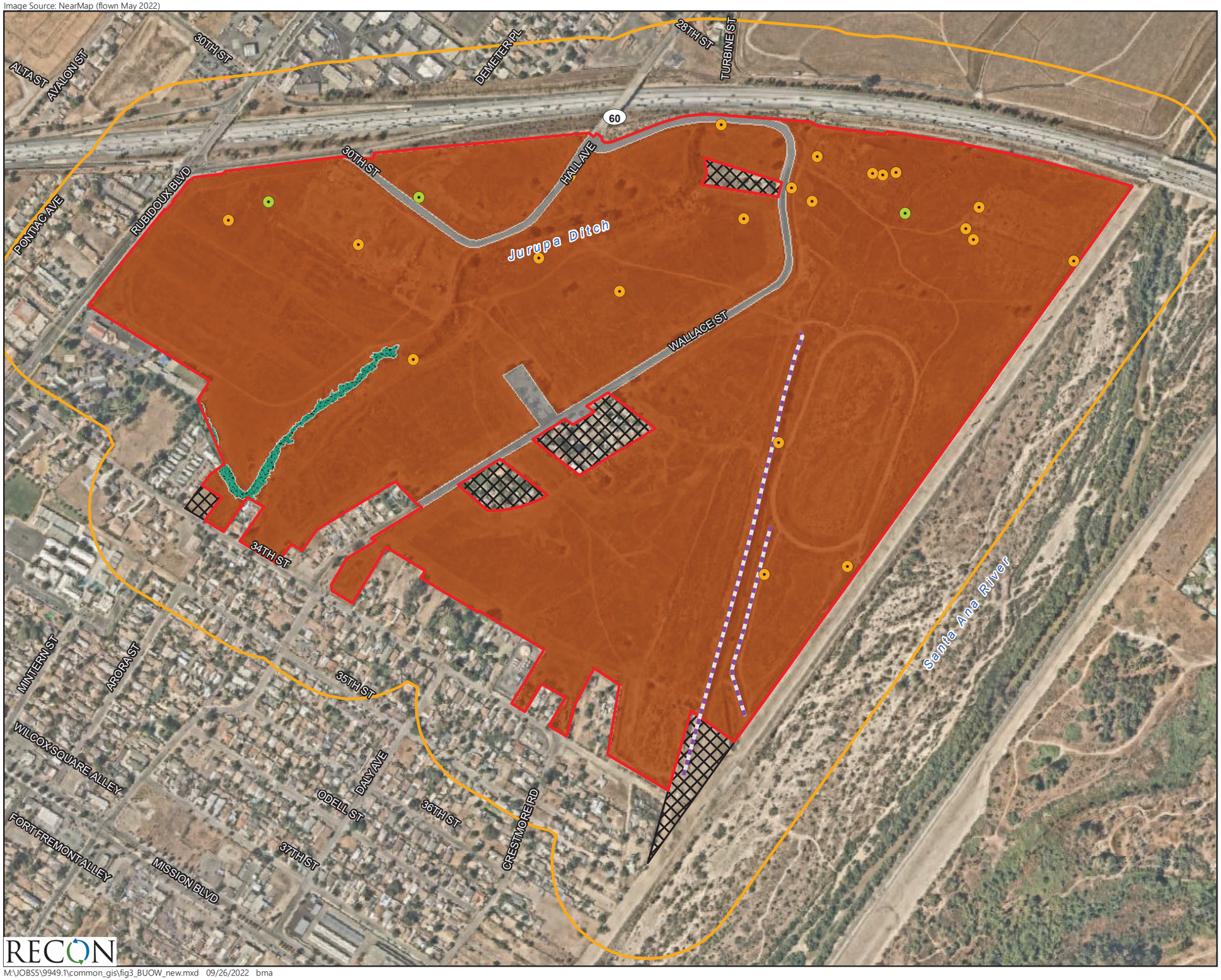

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FIGURE 3
Focused Burrow and Focused Burrowing Owl Survey Results

PHOTOGRAPH 1
View of Western Burrowing Owl Habitat, Looking East

PHOTOGRAPH 2
View of Western Burrowing Owl Habitat, Looking South

PHOTOGRAPH 3
View of Small Mammal Burrows, Looking North

PHOTOGRAPH 4
View of Small Mammal Burrows, Looking West

PHOTOGRAPH 5
Bones Found Outside a Burrow

PHOTOGRAPH 6
Whitewash Found Outside a Burrow Complex

PHOTOGRAPH 7
Feathers Found Outside a Burrow