August 22, 2023
Revised September 19, 2023

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VIA EMAIL
canderson@tbplanning.com

Subject: Results of a Focused Survey for Burrowing Owl for the L-4 Project in the City of Lancaster, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report presents the results of focused surveys for the western burrowing owl (*Athene cunicularia hypugaea*) for the L-4 Project (hereinafter referred to as "the Proposed Project") in the City of Lancaster, Los Angeles County, California (Exhibit 1). The purpose of the survey was to determine the presence or absence of the western burrowing owl during its breeding period (i.e., March 1 to August 31) on or immediately adjacent to the Project area. The habitat assessment determined that potentially suitable habitat for the western burrowing owl was present and, as a result, focused surveys were required. The surveys were completed in accordance with the California Department of Fish and Wildlife's (CDFW's) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) by Psomas biologists who have the necessary training and experience to conduct surveys for burrowing owls.

PROJECT LOCATION AND SETTING

The approximately 11-acre project site is located in the City of Lancaster, Los Angeles County, California. The project site is located south of West Avenue L, west of Sierra Highway, north of West Avenue L 4, and east of 8th Street West (Exhibit 1). The project site is located on the U.S. Geologic Survey's (USGS's) Lancaster West 7.5-minute quadrangle map (Exhibit 2). The project site is flat with elevations range from approximately 2,485 to 2,501 feet above mean sea level. Surrounding land uses consist of industrial, commercial, and undeveloped land. Vegetation on the site is comprised of disturbed rubber rabbitbrush scrub (with widely spaced shrubs) and disturbed/developed (Exhibit 3).

BACKGROUND

The western burrowing owl is a grassland specialist distributed throughout western North America, where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments, with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Poulin et al. 2020; Shaffer et al. 2022). Burrowing owls in Florida excavate their own burrows, but western burrowing owls depend upon the presence of burrowing mammals whose burrows are used for roosting and nesting (Poulin et al. 2020). The presence or absence of colonial fossorial mammal burrows (e.g., California ground squirrels [*Spermophilus beecheyi*]) is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows

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are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks; debris; or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Burrowing owls often use "satellite", or non-nesting burrows, moving chicks into them from the nesting burrow, presumably to reduce the risk of predation (Desmond and Savidge 1998) and possibly to avoid nest parasites (Shaffer et al. 2022). One pair may use up to ten satellite burrows (James and Seabloom 1968). Individual burrowing owls have a moderate to high site fidelity to previously used burrow complexes and often use the same burrows for nesting year after year.

The western burrowing owl was once abundant and widely distributed within coastal Southern California, but it has declined precipitously in Los Angeles, Orange, San Diego, Riverside, and San Bernardino Counties. Although a petition was submitted to list the California population of the western burrowing owl as an Endangered or Threatened species, the CDFW declined to list the burrowing owl as either Threatened or Endangered in consideration of its overall population throughout the state. However, the CDFW considers the burrowing owl to be a California Species of Special Concern (CDFW 2023).

SURVEY METHODOLOGY

Focused surveys for the burrowing owl were conducted during the breeding season, which extends from March 1 to August 31. The CDFW guidelines specify time periods in which the four focused crepuscular surveys should be conducted during the breeding season: at least one survey between February 15 and April 15; three surveys between April 15 and July 15; with at least one survey after June 15. Surveys should be conducted at least three weeks apart.

Glenn Lukos Associates, Inc. biologists conducted the initial habitat assessment and burrow survey on March 7, 2023. The burrow survey results were consistent with previously documented burrows shown in Exhibit 4 (GLA 2023). The burrow survey was conducted by walking the Project site in 10- to 20-meter (approximately 33 feet to 65 feet) belt transects (depending on shrub coverage) to achieve 100 percent visual coverage. Any natural or man-made cavities large enough to allow a burrowing owl to enter were inspected for evidence of occupation. Evidence of occupation may include prey remains, cast pellets, white-wash, feathers, and observations of owls adjacent to burrows. The burrow survey was conducted at least five days after rain, which could have washed away potential sign. Areas containing suitable habitat within 500 feet of the Project site were surveyed with binoculars.

The CDFW guidelines specify time periods in which the four focused crepuscular surveys should be conducted during the breeding season: at least one survey between February 15 and April 15; three surveys between April 15 and July 15; with at least one survey after June 15. Surveys should be conducted at least three weeks apart. Glenn Lukos Associates, Inc. biologists conducted the initial focused crepuscular survey on March 7, 2023. Psomas Biologist Sarah Thomas and Psomas Senior Biologist Marc Blain conducted subsequent focused crepuscular surveys on May 25; June 16 and July 7, 2023. These surveys were conducted from either one hour before sunrise to two hours after, or from two hours before sunset to one hour after. The surveys were conducted when light conditions were sufficient to observe burrowing owl flights. All potential habitat (e.g., areas where potentially suitable burrows were located) within the survey area was surveyed by walking in meandering transects to allow 100 percent visual coverage of the survey area. The transects were spaced no more than approximately 65 feet apart in order to ensure 100 percent visual coverage of the ground surface. At the start of each transect and, at least, every 300 feet, the survey area was scanned for burrowing owls or burrowing owl sign (e.g., pellets, prey remains, whitewash, or decoration) using binoculars. Periodically, binoculars were used to inspect

holes; crevices; and potential perches such as rocks, fence posts, and other elevated structures for the presence of owls while listening for owl calls. All wildlife observed were recorded in field notes (Attachment B). Survey times and weather conditions are summarized in Table 1 below.

TABLE 1
SUMMARY OF BURROWING OWL SURVEYS

Survey Number	Date	Time (Start/End)	Surveyor(s)	Weather Conditions		
				Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
Burrow Survey	3/7/2023	5:56 AM–7:14 AM	GLA Biologists	34/39	8–10/8–10	Clear/Clear
Crepuscular Survey 1	3/7/2023	5:56 AM–7:14 AM	GLA Biologists	34/39	8–10/8–10	Clear/Clear
Crepuscular Survey 2	5/25/2023	6:30 AM–8:20 AM	Thomas/Blain (Psomas)	62/73	0–1/0–1	25/25
Crepuscular Survey 3	6/16/2023	5:45 AM–7:30 AM	Thomas (Psomas)	60/75	0–3/0–3	Clear/Clear
Crepuscular Survey 4	7/7/2023	6:30 AM–7:35 AM	Thomas (Psomas)	68/76	0–1/0–1	50/50

GLA: Glenn Lukos Associates, Inc.
°F: Fahrenheit; mph: miles per hour; %: percent

SURVEY RESULTS

No burrowing owl individuals or active burrowing owl burrows were observed during the surveys. Additionally, no evidence (i.e., cast pellets, white-wash, feathers, or prey remains) of burrowing owl was detected during the surveys. The survey area supports high density of California ground squirrel burrows; the majority of which are currently occupied by ground squirrels. Burrowing owls are unable to utilize ground squirrel burrow complexes while they remain occupied. Burrowing owl is not expected to occur in the survey area at this time.

A complete list of all wildlife species observed during the surveys is provided in Attachment A of this report.

Psomas appreciates the opportunity to assist on this Project. If you have any comments or questions, please call Marc Blain at 626.351.2000.

Sincerely,
PSOMAS

Marc T. Blain
Senior Project Manager

Sarah Thomas
Biologist

Exhibits: Exhibit 1– Project Location
Exhibit 2– U.S. Geological Survey 7.5-Minute Quadrangle
Exhibit 3– Survey Results
Attachments: Attachment A – Wildlife Compendium

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Aerial Source: Nearmap 2023

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Project Location

Exhibit 1

L-4 Project

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Feet

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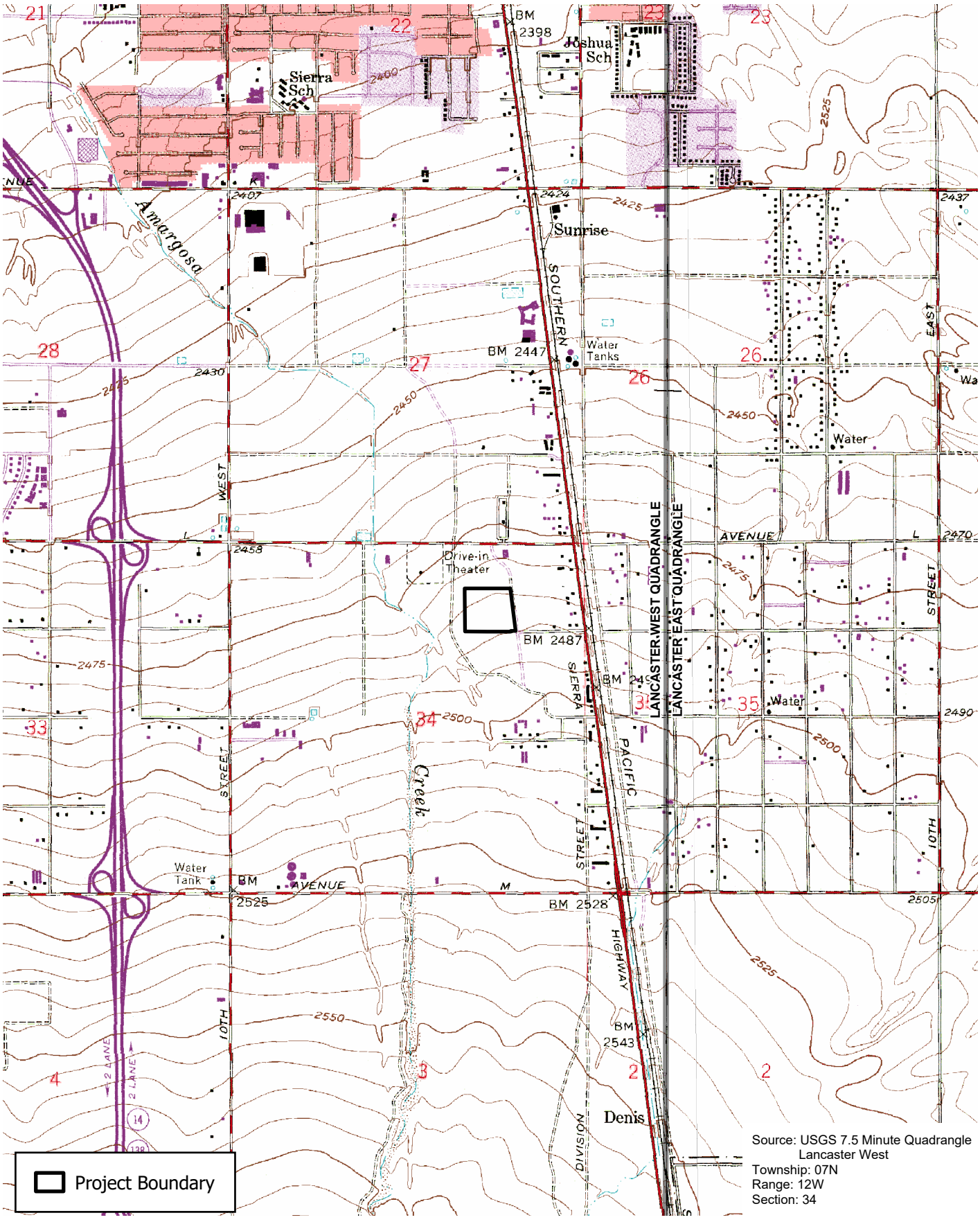

D:\Projects\3COV\L4\PRO\L4_Projects\L4_Projects.aprx\USGS 7.5-Minute Digital Quadrangle

USGS 7.5-Minute Quadrangle

Exhibit 2

L-4 Project

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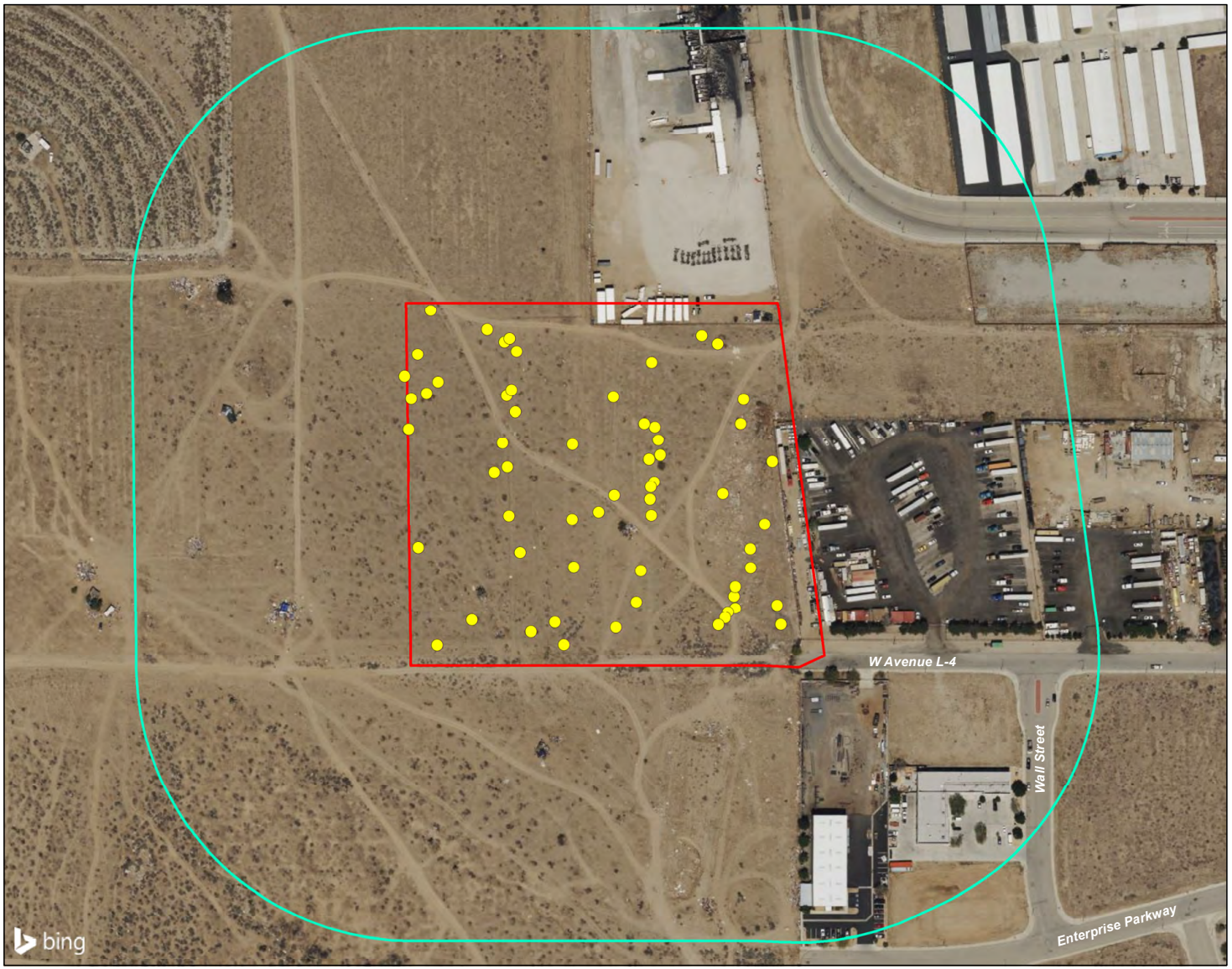

Project Site

500' Visual Survey Area

Burrow

Source: Glenn Lukos Associates 2023

Survey Results

Exhibit 3

L-4 Project

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ATTACHMENT A

WILDLIFE COMPENDIUM

WILDLIFE OBSERVED DURING SURVEYS

Species	
Scientific Name	**Common Name**
LIZARDS	
PHRYNOSOMATIDAE – SPINY LIZARD FAMILY	
Uta stansburiana	common side-blotched lizard
BIRDS	
TYRANNIDAE – TYRANT FLYCATCHER FAMILY	
Sayornis saya	Say's phoebe
CORVIDAE – JAY AND CROW FAMILY	
Corvus corax	common raven
ALAUDIDAE – LARK FAMILY	
Eremophila alpestris	horned lark
AEGITHALIDAE – BUSHTIT FAMILY	
Psaltriparus minimus	bushtit
TURDIDAE – THRUSH FAMILY	
Sialia mexicana	western bluebird
MIMIDAE – MOCKINGBIRD AND THRASHER FAMILY	
Mimus polyglottos	northern mockingbird
PASSERIDAE – OLD WORLD SPARROW FAMILY	
*Passer domesticus**	house sparrow*
FRINGILLIDAE – FINCH FAMILY	
Haemorhous mexicanus	house finch
MAMMALS	
SCIURIDAE – SQUIRREL FAMILY	
Otospermophilus beecheyi	California ground squirrel
* Non-native species	