Appendix C

Burrowing Owl Focused Survey Results

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June 21, 2024

Miles Eaton
Kimley-Horn
3801 University Avenue, Suite 300
Riverside, CA 92501

Subject: Habitat Assessment and Burrowing Owl Focused Survey Results for the Raising Cane's Victorville Project

Dear Mr. Eaton,

This letter report details the results of the 2024 breeding season surveys for the burrowing owl (*Athene cunicularia*) conducted within the Raising Cane's Victorville site (Project Site) and applicable buffer zone (150 meters). The Project Site is located in the City of Victorville in San Bernardino County, immediately west of Civic Drive and north of Roy Rogers Drive (Attachment A, Figure 1). The Project Site occurs in the southwest quarter of Section 17, Township 5 North, Range 4 West and is within the *Victorville, California* USGS 7.5-minute quadrangle (USGS 2021). The Project Site is situated within portions of three adjacent parcels with APNs 2106-201-24, -25, and -27.

Blackhawk Environmental, Inc. (Blackhawk) biologists conducted burrowing owl focused surveys in suitable habitat in accordance with the guidelines developed by the California Department of Fish and Wildlife (CDFW 2012). Breeding season surveys were conducted to determine the presence or absence of the species within the Project Site and a 150-meter buffer, and no burrowing owls were detected. A discussion of the results of the conducted surveys is provided below.

Burrowing Owl

The burrowing owl is a CDFW Species of Special Concern (SSC) that primarily breeds in the western United States and northern Mexico within its North American range. Additional populations exist year-round in Florida, Cuba, South America, and some Caribbean islands. Concentrated populations of burrowing owls within California currently occur among the irrigated agricultural landscapes of Imperial and Central Valleys (Schuford and Gardali 2008). A lower volume of burrowing owls occurs within the Mojave and Colorado deserts with occupied areas widely scattered throughout (Schuford and Gardali 2008). The species occurs in numerous habitat types, and preferred habitats are largely open with scattered, low-lying vegetation and/or bare ground prevalent over wide areas. Unlike other owl species, the burrowing owl is diurnally active, with peaks of activity during crepuscular hours; however, it is also nocturnally active and can be active anytime over a 24-hour period. It consumes a variety of prey items, including reptiles, birds, small rodents, amphibians, and bats, but prefers large arthropods (Haug et al. 1993). Also unique to this owl species, it is a subterranean dweller. It usually does not dig its

own burrows but prefers to utilize and/or modify existing openings in the ground created by other animals or humans as shelter and nesting sites. The breeding season in California extends from the beginning of February through the end of August. Up to 10 eggs are laid in a shallow nest lined with grass, cough pellets, trash, excrement and other items inside a selected burrow or burrow-surrogate pipe, culvert, nest box or other subterranean cavity. The female incubates for 21 to 30 days, and both parents feed fledglings until they can fend for themselves. The young then disperse to available habitats with suitable burrow sites in the summer and fall months.

Survey Methods

Blackhawk biologists Katie Quint, Seth Reimers, and Kris Alberts conducted an initial habitat assessment survey on March 7, 2024. Following the habitat assessment, Blackhawk biologists conducted burrowing owl focused surveys in accordance with the guidelines developed by the CDFW (CDFW 2012) on April 3, April 18, May 23, and June 17, 2024. Prior to conducting focused surveys, a literature review was conducted that included analysis of California Natural Diversity Database (CNDDB) records out to five miles from the Project Site. Twenty-eight records of burrowing owls ranging from the year 1997 to 2009 were identified during the database query (CDFW 2024). Two of the records, both from 2006, were observed within the 150-meter buffer north and southeast of the Project Site.

The current surveys for this Project included a habitat assessment and four subsequent breeding season burrowing owl surveys due to suitable habitat identified onsite. For the purposes of this report, the "Survey Area" for burrowing owl occupancy includes the Project's proposed ground disturbance footprint (Project Site) and a 150-meter buffer (Figure 2). Biologists walked a maximum of 20-meter-wide belt transects within the Survey Area to provide 100-percent visual coverage of the Survey Area. Transects were spaced as close as 10 meters, depending on vegetative density and topography. While walking the transects, biologists specifically searched for burrowing owl and/or burrowing owl sign (i.e., cough pellets, whitewash, feathers, tracks, nest decorations). Biologists paused at least every 100 meters, as appropriate, to scan for burrowing owls using binoculars and/or the naked eye. In addition, the biologists listened for burrowing owl calls. All burrowing owl-relevant data and wildlife species were recorded in the field notes of the biologists. All observed burrowing owl-suitable burrows and habitats are shown on Figure 2. Survey conditions are presented in Table 1.

Vegetation community classifications in this report follow Oberbauer et al. (2008), which is based on Holland (1986). CDFW guidelines call for the use of Sawyer et al. (2009); however, Sawyer et al. (2009) does not contain a vegetation classification equivalent for disturbed land, which occurs on-site.

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Table 1: Survey Conditions							
Date	**Survey Type**	**Personnel**	**Start/End Times**	**Start/End Temperature (F°)**	**Start/End Wind Speed (mph)**	**Start/End Cloud Cover (%)**	**Start/End Precipitation**
3/7/24	Habitat Assessment	Seth Reimers Kris Alberts Katie Quint	0740-0930	46/50	9-12/3-8	0/60	0/0
4/3/24	Survey #1	Katie Quint Lorena Bernal	0610-0806	43/52	1-3/1-3	0/0	0/0
4/18/24	Survey #2	Katie Quint Sarah Toback	0715-0845	58/66	3-5/5-6	100/100	0/0
5/23/24	Survey #3	Seth Reimers Andy Steyers	0615-0805	55/64	1-4/1-3	0/0	0/0
6/17/24	Survey #4	Hayley Milner Sarah Toback	0600-0745	56/62	0-3/3-5	0/0	0/0

Existing Conditions

The Project Site is bounded by Roy Rogers Drive to the south, Civic Drive and developed areas to the east and north, and undeveloped land to the west (see Figure 2). The Project Site is relatively flat but contains a significant mound associated with previous grading on the west side of the Project Site and further remnant rows of grading material occur within the Survey Area west of the Project Site. A small hillside occurs in the northeast portion of the Survey Area. Two soil types occur in the Survey Area, including Helendale loamy sand and Lavic loamy fine sand (U.S. Department of Agriculture 2024).

Due to the presence of homeless encampments, portions of the Survey Area were visually scanned from a distance using binoculars (Figure 2).

Habitat Assessment Results

A burrowing owl habitat assessment was conducted on March 7, 2024, within the Survey Area to evaluate the suitability of the habitat for this species. The Project Site supports three land cover/habitat types: creosote bush scrub, creosote bush scrub – disturbed, and disturbed habitat. Each of the land cover/habitat types were determined to be suitable for burrowing owls and therefore included in the subsequent focused surveys. Descriptions for each of the three land cover/habitat types are detailed below.

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Creosote Bush Scrub
Remnant native habitat within the Project Site includes Creosote Bush Scrub (CBS). Dominant species include creosote bush (*Larrea tridentata*), Mediterranean grass (*Schismus barbatus*), and Russian thistle (*Salsola tragus*). One western Joshua tree (*Yucca brevifolia*) previously identified within the Project Site occurs within this habitat type. Within CBS, annual herbaceous coverage was generally low, with only a few grass and forb species sparsely covering the ground between shrubs. Shrub coverage ranged between 10 and 30 percent with an average shrub height of one to four feet.

Creosote Bush Scrub – Disturbed

Creosote Bush Scrub - Disturbed (CBS – D) habitat within the Project Site is primarily associated with disturbed areas in the western half of the Project Site. These areas exhibit increased levels of anthropogenic disturbance where vegetation had been previously cleared or thinned adjacent to areas of Disturbed Habitat. Dominant species include creosote bush, Russian thistle, and rubber rabbitbrush (*Ericameria nauseosa*) with subdominant species that include Mediterranean grass and flatcrown buckwheat (*Eriogonum deflexum*). Within CBS-D, large areas of bare ground and increased dominance of non-native species are present. Shrub coverage was much less than the undisturbed CBS, ranging between 5 and 10 percent with an average shrub height of three feet.

Disturbed

Disturbed Habitat is present within the Project Site, occurring as the dominant land cover type. Disturbed Habitat is characterized by a mosaic of bare ground and non-native ruderal species such as Mediterranean grass and redstem filaree (*Erodium cicutarium*). Disturbance includes dirt roads and tire tracks that are evident in nearly all areas of the Project Boundary except in the northeast portion. Disturbed habitat within the Survey Area also includes areas of bare ground supporting little to no vegetation; indicative of historical or current anthropogenic use (i.e., dirt roads, previous grading, and margins of developed areas).

Suitable burrows were detected on-site during the habitat assessment; however, no whitewash, feathers, pellets, or bones were observed within or adjacent to these burrows.

Focused Burrowing Owl Survey Results

Focused burrowing owl surveys were conducted on four separate dates: April 3, April 18, May 23, and June 17, 2024. All four surveys were conducted between morning civil twilight and 10 a.m. per CDFW Guidelines (2012). Belt transects were walked through all suitable habitat identified within the Survey Area. No burrowing owl or sign of active burrows used by burrowing owls were detected at the time the surveys were completed. Suitable burrows were found scattered throughout the Survey Area. The focused burrowing owl surveys resulted in 101 unoccupied suitable burrowing owl burrows and eight unoccupied suitable burrowing owl burrow complexes within the Survey Area; eight unoccupied suitable burrowing owl burrows were found on the Project Site itself. **No burrowing owls or burrowing owl sign were observed within the Project Site and/or Survey Area** (Figure 2).

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Burrows ranged in size from 8 to 20 centimeters in diameter and all suitable burrows appeared to be former California ground squirrel (*Otospermophilus beecheyi*) burrows. Most of the burrows were located on flat terrain under root systems of creosote bush scrub and bare ground areas associated with anthropogenic disturbance.

Conclusion and Mitigation Requirements

Although there is moderate potential for this species to occur based on two adjacent historical records and the presence of suitable habitat and burrows on-site, no burrowing owl, active burrows, or burrowing owl sign were observed during the surveys. However, to ensure that no potential impacts occur to this species, it is recommended that two pre-construction Take-Avoidance Surveys be conducted within 14 days prior to ground disturbance to detect the presence of any burrowing owls. The first survey shall be conducted no more than 14 days prior to the initiation of ground disturbing and/or vegetation clearing activities. The second survey shall be conducted within 24 hours of initial ground disturbing and/or vegetation clearing activities. These surveys will include all areas where suitable habitat is present within the Survey Area (CDFW 2012).

If you have any questions concerning this letter report, feel free to contact me anytime at katie@blackhawkenv.com or 703-994-3128.

Sincerely,

Katie Quint
Staff Biologist

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References

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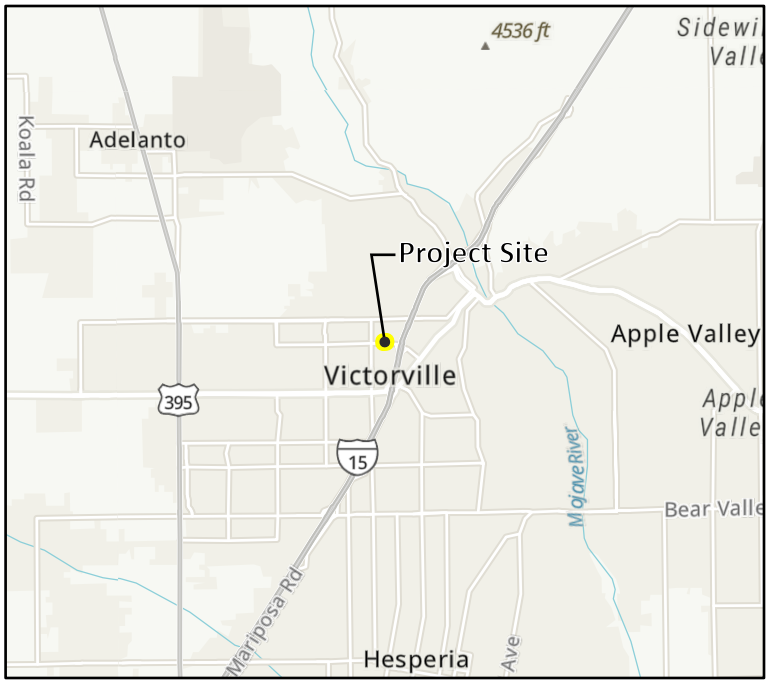
U.S. Geological Survey (USGS)

2021 Victorville 7.5 Minute Topographic Map.

ATTACHMENT A

Figures

Blackhawk Environmental



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Feet

Figure 1

Project Vicinity and Location

Raising Cane's Victorville

Blackhawk Environmental

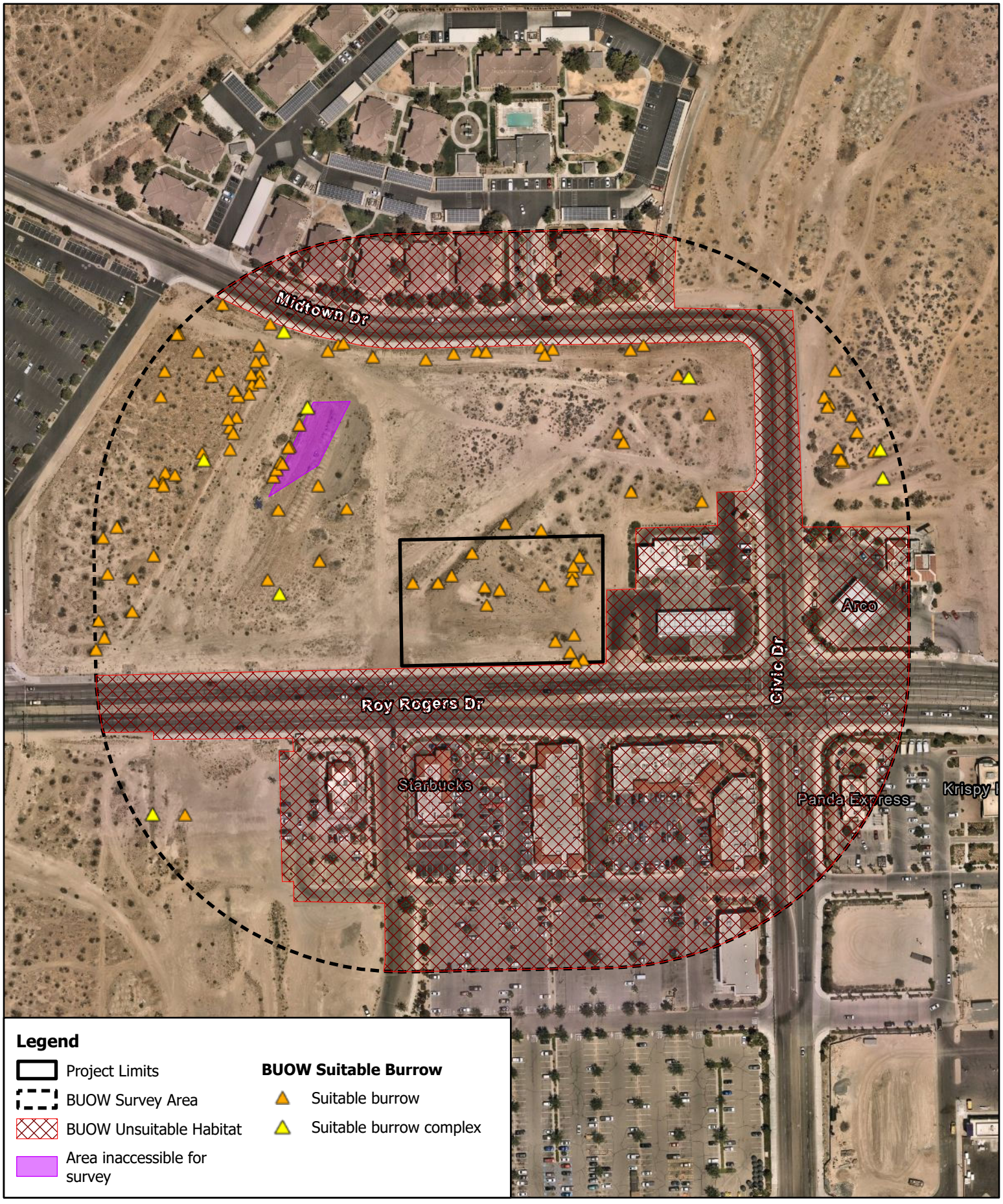

Figure 2

Burrowing Owl Survey Results

Raising Cane's Victorville

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ATTACHMENT B

Photo Pages

Blackhawk Environmental

Photograph 1: South-facing photo of disturbed creosote bush habitat in northwest portion of Project Site.

Photograph 2: East-facing photo of disturbed habitat in northwest portion of Project Site.

Photograph 3: South-facing photo of creosote bush scrub habitat in northern portion of Project Site.

Photograph 4: West-facing photo of creosote bush scrub habitat in northeastern portion of Project Site.

Photograph 5: North-facing photo of disturbed habitat in southeastern portion of Project Site.

Photograph 6: Southwest-facing photo of disturbed habitat in southwestern portion of Project Site.

Photograph 7: East-facing photo of disturbed habitat and creosote bush scrub habitat in the center of the Project site.

Photograph 8: Downward-facing photo of a suitable burrow located under a creosote bush in the northwest portion of the Survey Buffer.

Photograph 9: Southeast-facing photo of a suitable burrow complex in the northwest portion of the Survey Buffer.

Photograph 10: Southeast-facing photo of a suitable burrow in the center of the Project Site.

Photograph 11: Downward-facing photo of a suitable burrow in the southeast corner of the Project Site.

Photograph 12: South-facing photo of a suitable burrow in the northeast corner of the Project Site.

Photograph 13: Downward-facing photo of a suitable burrow complex in the southwest portion of the Survey Buffer.

Photograph 14: West-facing photo of a suitable burrow complex in the northeast portion of the Survey Buffer.