HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.**helixepi**.com

May 4, 2018 ASE-02

Ms. Yasmin Tabatabayi
A & S Engineering
28405 Sand Canyon Rd., Suite "B"
Canyon Country, CA 91387

Subject: Focused Burrowing Owl Survey for the ARCO Station (Redlands and Hemlock) Project.

Dear: Ms. Tabatabayi:

At your request, HELIX Environmental Planning, Inc. (HELIX) conducted a focused burrowing owl (*Athene cunicularia*) survey for the ARCO station project. The results of the survey are presented in this letter.

PROJECT LOCATION AND DESCRIPTION

The ARCO Station (Redlands and Hemlock) Project (project) is located in the City of Moreno Valley (City) in northwestern Riverside County (Figure 1, *Regional Location*). The project is located within the southeastern quarter of the northwestern quarter of Section 2 of Township 3 South, Range 3 West, on the U.S. Geological Survey (USGS) 7.5' Sunnymead quadrangle (Figure 2, *USGS Topography*). The 6.75-acre project area is located within Assessor Parcel Number (APN) 488-310-012, and is located northwesterly of Redlands Boulevard and Spruce Avenue (Figure 3, *Aerial Photograph*). The property is located within Reche Canyon/Badlands Area Plan of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP), but is not within a cell or cell group (Dudek 2003). The project proposes to develop the property as a gas station consisting of a 3,800-square-foot (sq. ft.) market with a 3,500-sq.-ft. drive-thru restaurant and approximately 45,000 sq. ft. of retail space.

METHODS

The focused burrowing owl survey was conducted by HELIX senior scientist Rob Hogenauer in accordance with the burrowing owl survey guidelines for the MSHCP (County of Riverside [County] 2006). The survey consisted of a habitat assessment on November 2, 2017, and a four-visit survey conducted in April 2018 (Table 1). During each of the surveys, Mr. Hogenauer walked transects between 20 and 30 meters wide across the entire project site and a 100-meter buffer. The remainder of the buffer was visual surveyed via binoculars out to 500 meters. The project was walked slowly and methodically, closely checking the areas that met the basic requirements of owl habitat:

- Open expanses of sparsely vegetated habitat (less than 30 percent canopy cover for trees and shrub);
- Gently rolling or level terrain;
- An abundance of small mammal burrows, especially those of California ground squirrel (*Spermophilus beecheyi*); and,
- Fence posts, rock, or other low perching locations.

Table 1
BURROWING OWL SURVEY DATES AND CONDITIONS

Date	Survey	Time and Conditions	
11/2/17	Habitat Assessment	Start	0740 hrs, 61°F, 100 % clouds, winds 1-2 mph
		End	0835 hrs, 61°F, 100 % clouds, winds 1-2 mph
4/6/18	1	Start	0620 hrs, 51°F, 50 % clouds, winds 2-3 mph
		End	0730 hrs, 52°F, 40 % clouds, winds 1-3 mph
4/16/18	2	Start	0620 hrs, 49°F, 30 % clouds, winds 1-2 mph
		End	0720 hrs, 51°F, 20 % clouds, winds 1-2 mph
4/20/18	3	Start	0630 hrs, 49°F, 90 % clouds, winds 1-2 mph
		End	0715 hrs, 50°F, 60 % clouds, winds 1-2 mph
4/27/18	4	Start	0600 hrs, 54°F, 100 % clouds, winds 1-3 mph
		End	0645 hrs, 54°F, 100 % clouds, winds 1-3 mph

Mr. Hogenauer recorded the location of burrows with potential to support burrowing owls. Potential burrow locations include fossorial mammal burrows at least 11 centimeters in diameter (California Department of Fish and Wildlife [CDFW] 2012), rock outcrops, and debris piles. Each potential burrow location was checked for signs of burrowing owl use which include:

- Pellets/Casting – regurgitated fur, bones, and insect parts,
- White wash – excrement, and
- Feathers.

RESULTS

The project site is made up of non-native grassland that is typical of fallow/abandoned dry farmed agricultural fields. The habitat assessment revealed that the entire project site consists of habitat with potential to be utilized by burrowing owl. Numerous California ground squirrel burrows were observed and mapped on the project site (Figure 4, *Potential Burrowing Owl Burrows*).

No burrowing owl, or sign of burrowing owl use, was observed on the project site or within the 500-foot buffer. Burrowing owls are presumed to be absent from the project site.

The MSHCP states that pre-construction surveys for burrowing owls will be conducted for all property that contain suitable burrowing owl habitat. Since the site has potential for burrowing owls to occur, a pre-construction survey should be conducted within 30 days prior to site disturbance.

We appreciate the opportunity to provide you with this report. Should you have questions or require additional information, please contact Beth Martinez at (619) 462-1515 or me at (562) 537-2426.

Sincerely,

Rob Hogenauer
Senior Scientist

Attachments:

Figure 1: Regional Location
Figure 2: USGS Topography
Figure 3: Aerial Photograph
Figure 4: Potential Burrowing Owl Burrows

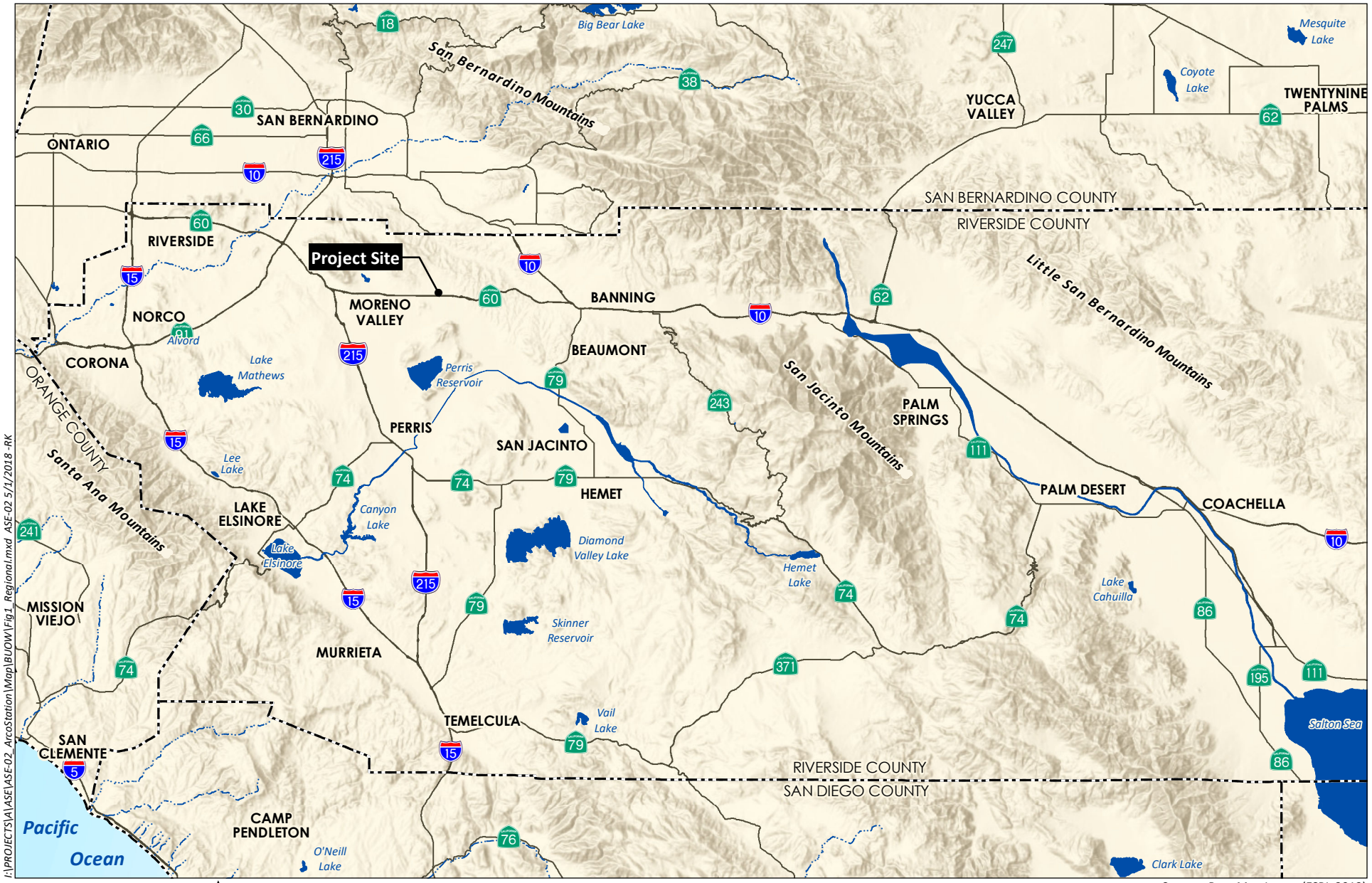
REFERENCES

California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation. March 7

County of Riverside (County) Environmental Programs Department. 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Available at: http://rctlma.org/Portals/1/EPD/consultant/burrowing_owl_survey_instructions.pdf. March 29.

Dudek and Associates. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Final MSHCP Volume I. Prep. for County of Riverside, Transportation and Land Management Agency.

Arco Station Redlands Blvd.



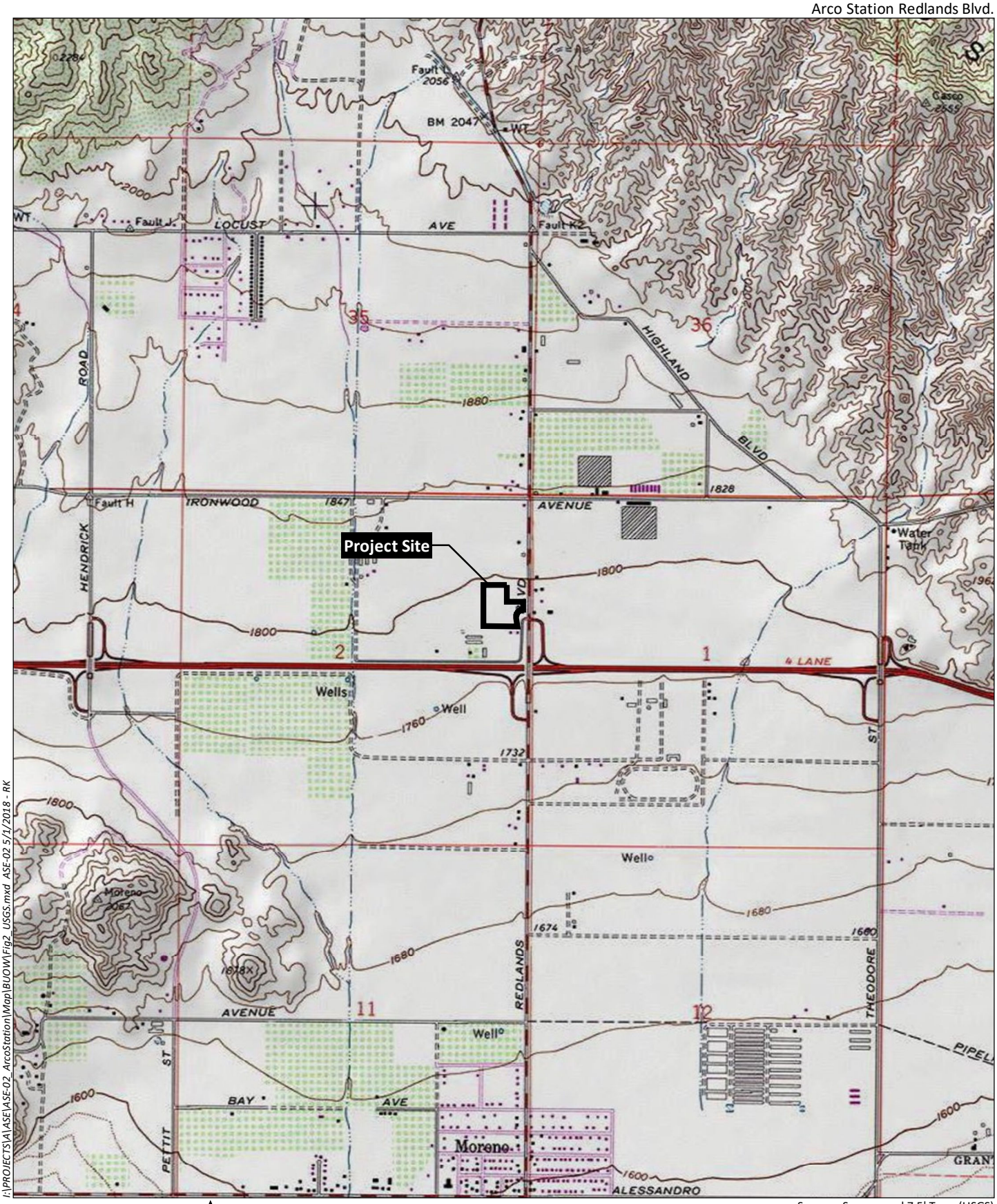
I:\PROJECTS\A\ASE\ASE-02 ArcoStation\Map\BUOW\Fig1 Regional.mxd ASE-02 5/1/2018 -RK

Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\A\ASE\ASE-02_ArcoStation\Map\BUOW\Fig2_USGS.mxd ASE-02 5/1/2018 - RK

0 2,000 Feet

Source: Sunnymead 7.5' Topo (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2

I:\PROJECTS\A\ASE\ASE-02_ArcoStation\Map\BUOW\Fig3_Aerial.mxd SEC-02 5/1/2018 -RK

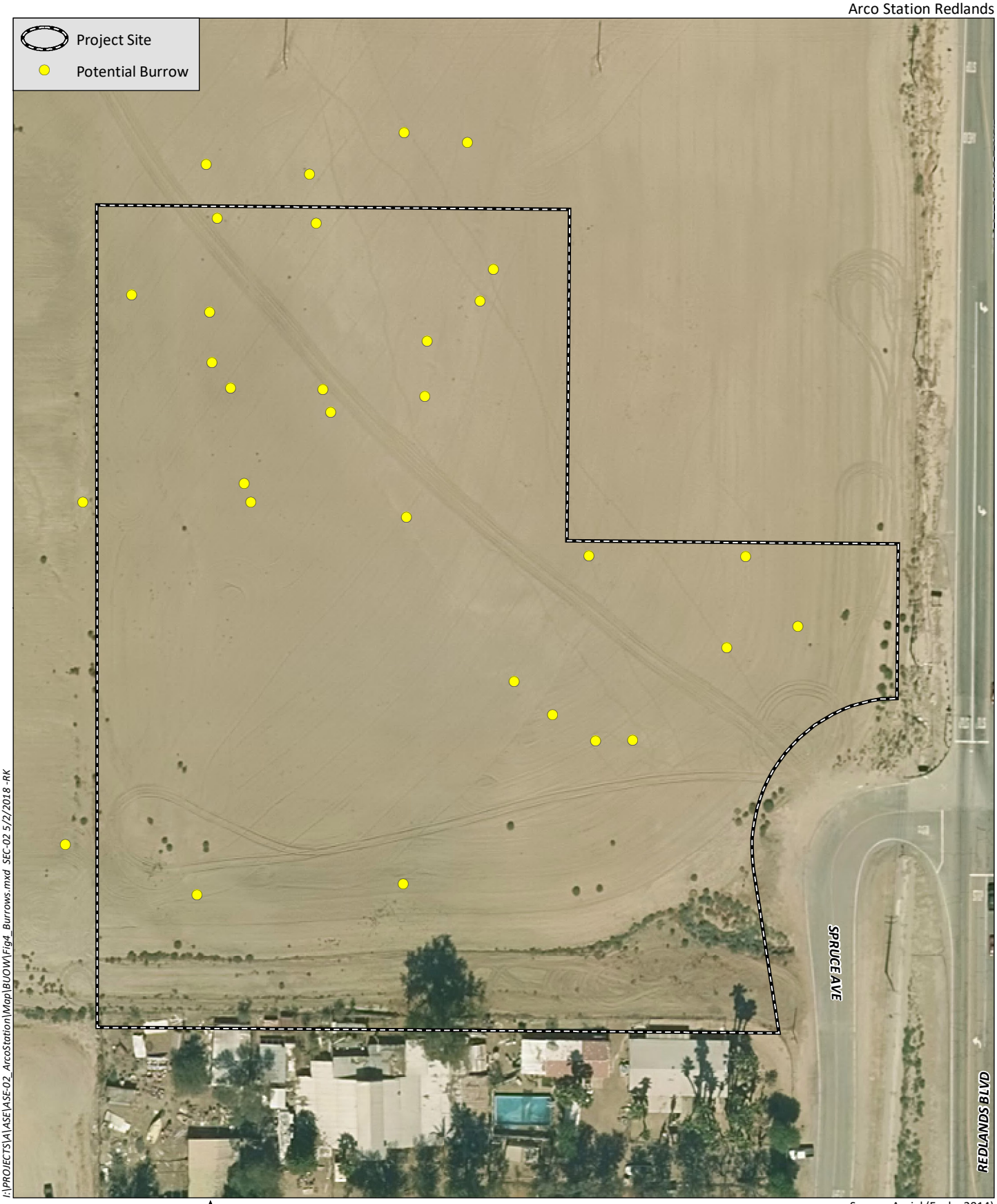
0 300 Feet

Source: Aerial (Eagle, 2014)

HELIX Environmental Planning

Aerial Photograph

Figure 3



Source: Aerial (Eagle, 2014)

HELIX Environmental Planning

Potential Burrowing Owl Burrows

Figure 4