Burrowing Owl Resource Summary Report

for the

ECO Substation Project

Prepared for:

SDGE

A Sempra Energy utility℠

Prepared by:

INSIGNIA ENVIRONMENTAL

May 7, 2010

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1 – INTRODUCTION

This Burrowing Owl Resource Summary Report (report) summarizes the results of the protocol-level western burrowing owl (*Athene cunicularia hypugaea*) surveys conducted for San Diego Gas & Electric Company's (SDG&E) East County (ECO) Substation Project (Proposed Project). This report was prepared in accordance with the April 1993 Burrowing Owl Survey Protocol and Mitigation Guidelines (Protocol) prepared by the California Burrowing Owl Consortium.

2 – PROJECT OVERVIEW

The Proposed Project is located in the southeastern portion of San Diego County, California. An overview of the Proposed Project area is provided in Figure 1: Project Overview Map. The Proposed Project involves the following components:

- Building a new approximately 58-acre 500/230/138 kilovolt (kV) substation (ECO Substation), with a loop-in from the existing Southwest Powerlink (SWPL) 500 kV transmission line, just south of United States Interstate 8, approximately four miles east of the community of Jacumba

- Rebuilding the existing Boulevard Substation located within the community of Boulevard

- Constructing a new approximately 13.5-mile-long, 138 kV transmission line between the new ECO Substation and the rebuilt Boulevard Substation

An extensive literature search—including a California Natural Diversity Database search—and several biological surveys of the Proposed Project area in 2008 and 2009 were conducted for the preparation of the Proposed Project's Proponent's Environmental Assessment for submittal to the California Public Utilities Commission (CPUC). No documented sightings of burrowing owls within the Proposed Project area were found during the literature search and no burrowing owls or potential burrowing owl burrows[1] were observed during the 2008 and 2009 reconnaissance-level biological field surveys. However, in December of 2009, a SDG&E biological monitor observed a burrowing owl west of the ECO Substation site while monitoring preliminary geotechnical boring activities being conducted for the Proposed Project. After consulting with the CPUC and the California Department of Fish and Game (CDFG), SDG&E decided to conduct winter and spring protocol-level burrowing owl surveys, in accordance with the Protocol, of the entire Proposed Project area. The results of Phase I, Phase II, and Phase III of these surveys are provided within the sections that follow.

3 – PHASE I: HABITAT ASSESSMENT

Typical habitat for the burrowing owl is comprised of level or gently-sloping open areas, with scattered vegetation that is typically heavily grazed, low-stature grasslands, or desert scrub.

[1] Typical burrowing owl burrows are approximately six inches or greater in diameter at the entrance and extend into the ground for at least two feet.

Suitable burrowing owl habitat may also include areas with trees and taller shrubs if the canopy covers less than 30 percent of the ground surface. The levelness and openness of suitable habitat aides the burrowing owls in both spotting potential predators and in locating prey. The availability of potential burrows is another vital component of suitable burrowing owl habitat. The burrows utilized by burrowing owl are those of small mammals, primarily those of ground squirrel (*Spermophilus* spp.) and American badger (*Taxidea taxus*). Occasionally, burrowing owl will utilize burrows constructed by desert tortoise (*Gopherus agassizii*).

3.0 METHODOLOGY

On January 11 and 12, 2010, Insignia Environmental biologists Jeffry Coward and William Fischer conducted surveys of the entire Proposed Project area for suitable burrowing owl habitat in accordance with Phase I: Habitat Assessment of the Protocol. The surveys were conducted from 10:30 a.m. to 5:15 p.m. on January 11 and from 7:00 a.m. to 3:00 p.m. on January 12. Both days were sunny with little cloud cover, with a temperature range of 41 to 72 degrees Fahrenheit. Visibility was excellent on both days.

The surveyors walked and/or drove the entire Proposed Project area, which includes the three parcels on which the ECO Substation and SWPL loop-in sites (approximately 377 acres) will be located, the proposed 138 kV transmission line right-of-way (ROW)—which includes the associated steel pole (SP) locations, access roads, fly yards, and work areas—and a 500-foot buffer around each area. During the habitat assessment fieldwork, the surveyors looked for relatively level areas that contained low-growing vegetation, a low density of taller vegetation (less than 30 percent total cover), potential burrow sites, a potentially adequate prey base represented by small mammal burrows or a source of large invertebrate populations (such as agricultural fields), open spaces for hunting, and perching sites.

3.1 RESULTS

The majority of the Proposed Project area was determined not to be suitable burrowing owl habitat due to the high density of vegetation (greater than 30 percent cover), steep unlevel terrain, presence of numerous large rock outcrops, extremely rocky soils, and/or complete lack of potential burrow sites. However, five areas were determined to support potentially suitable habitat for burrowing owls based on the relatively level terrain, low-growing or low-density vegetation, and potential burrows. Representative photographs of non-suitable and suitable habitat are provided in Attachment A: Representative Photographs. Attachment B: Suitable Burrowing Owl Habitat Maps includes an overview of the entire Proposed Project area, including suitable burrowing owl habitat areas and detailed maps of each of the five suitable habitat areas. A Phase II: Burrow Survey was conducted of these five areas; the results of the burrow surveys are presented in Section 3: Phase II: Burrow Surveys. A description of each of the five suitable habitat areas follows.

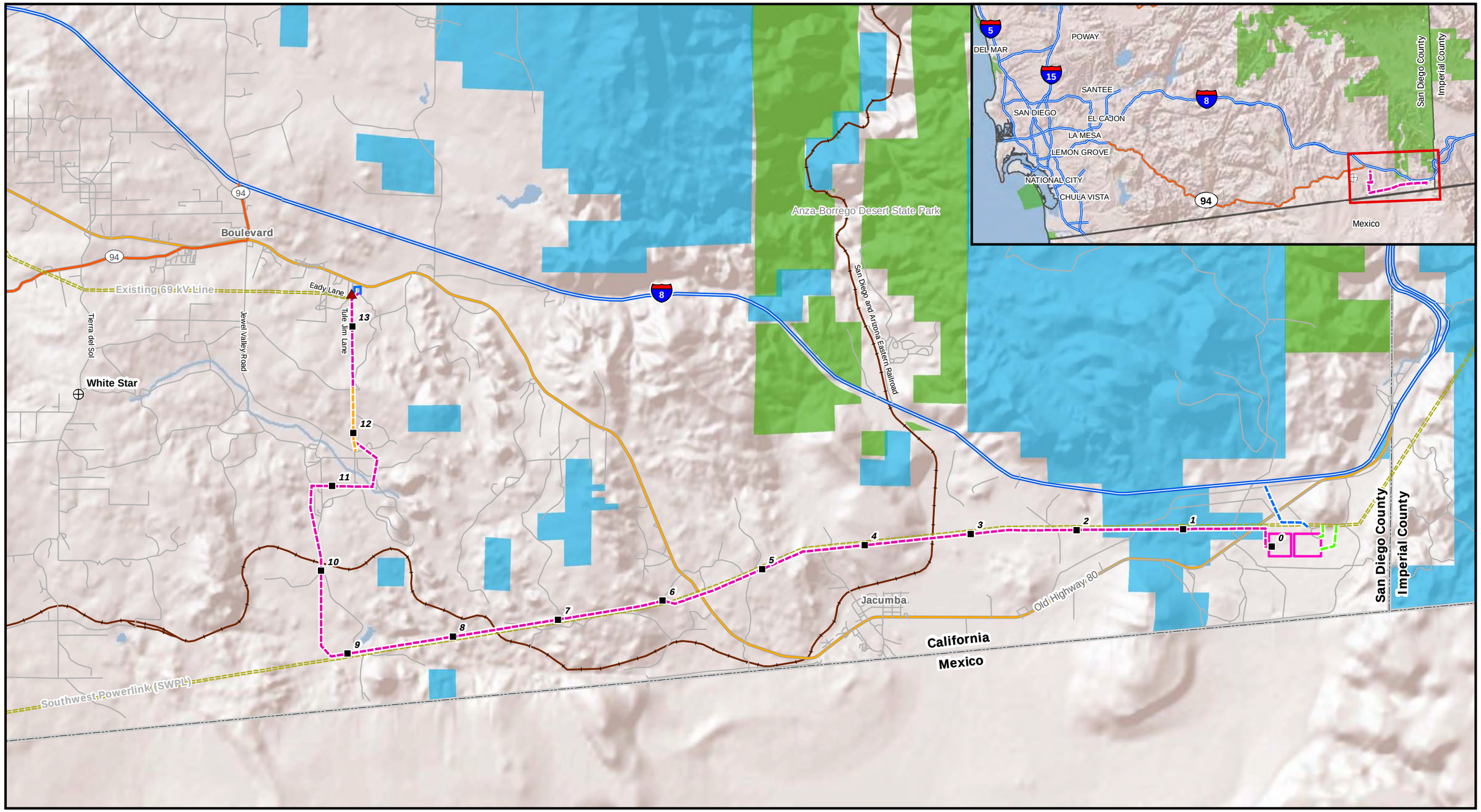

Figure 1: Project Location Map

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Existing Boulevard Substation
- Proposed 138 kV Line Milepost
- Communication Facility
- Bureau of Land Management
- California State Park
- Interstate
- Highway
- Local Road
- Major Road
- Railroad

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Z:\GIS\Projects and Data\California\Projects\SDGE E. County Sub\Mxds\Permitting\BUOW\Figure 1 Project Location.mxd

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3.1.0 Area 1: ECO Substation

Area 1 includes the ECO Substation site, the SWPL loop-in, the temporary distribution line, and the 138 kV transmission line ROW, from approximately 500 feet east of SP 103 to SP 105. Area 1 was determined to support potential suitable burrowing owl habitat based the presence of less than 30-percent canopy cover, presence of ground squirrel burrows, and the recent sighting of a burrowing owl in the area. Representative photographs of the area are provided in Attachment A: Representative Photographs and a detailed map of the area is provided in Map 1 of 5 in Attachment B: Suitable Burrowing Owl Habitat Maps. This area is approximately 377 acres in size and gently slopes east to west. Mixed desert scrub and juniper woodland encompasses the area. In addition, the area contains numerous small dry washes and other open spaces with less than 15-percent canopy cover. Several small mammal burrows were observed during the habitat assessment field survey.

Wildlife species observed during the habitat assessment field survey included western scrub-jay (*Aphelocoma californica*), phainopepla (*Phainopepla nitens*), black-throated sparrow (*Amphispiza bilineata*), California thrasher (*Toxostoma redivivum*), turkey vulture (*Cathartes aura*), and common raven (*Corvus corax*).

3.1.1 Area 2: Fly Yard near SP 87

Area 2 includes the proposed fly yard near SP 87, just east of a large agricultural field. Area 2 was determined to support potential suitable burrowing owl habitat based on the flat terrain, lack of vegetation, presence of ground squirrel burrows, and the close proximity of a large agricultural field. Representative photographs of the area are provided in Attachment A: Representative Photographs and a map of the area is provided in Map 2 of 5 in Attachment B: Suitable Burrowing Owl Habitat Maps. The area is flat, approximately 21 acres in size, and dominated by low-growing non-native grasses and forbs. In addition, there are widely spaced mixed desert scrub plant species. Several small mammal burrows were observed during the habitat assessment field survey.

Wildlife species observed during the habitat assessment field survey included side-blotched lizard (*Uta stansburiana*), western scrub-jay, black-throated sparrow, and common raven.

3.1.2 Area 3: 138 kV Transmission Line ROW Between SP 77 and SP 80

Area 3 includes the 138 kV transmission line ROW between SP 77 and SP 80. Area 3 was determined to support potential suitable burrowing owl habitat based on the flat terrain and the presence of low-growing vegetation and small mammal burrows. Representative photographs of the area are provided in Attachment A: Representative Photographs and a map of the area is provided on Map 3 of 5 in Attachment B: Suitable Burrowing Owl Habitat Maps. This area is flat, approximately 76 acres in size, and is dominated by low-growing non-native grasses and forbs. In addition, there are widely spaced mixed desert scrub plant species. A few small mammal burrows were observed during the habitat assessment field survey.

Wildlife species observed during the habitat assessment field survey included western scrub-jay, black-throated sparrow, red-tailed hawk (*Buteo jamaicensis*), common raven, and black-tailed jackrabbit (*Lepus californicus*).

3.1.3 Area 4: Fly Yard near SP 16

Area 4 includes the proposed fly yard near SP 16. Area 4 was determined to support potential suitable burrowing owl habitat based on the flat terrain and the presence of low-growing vegetation and ground squirrel burrows. Representative photographs of the area are provided in Attachment A: Representative Photographs and a map of the area is provided in Map 4 of 5 in Attachment B: Suitable Burrowing Owl Habitat Maps. This area is flat, approximately 32 acres in size, and dominated by low-growing non-native grasses and forbs. In addition, there is a small agricultural field located along the southeastern edge of the area, which may provide a suitable prey base for burrowing owl. Numerous small mammal burrows were observed during the habitat assessment field survey.

Wildlife species observed during the habitat assessment field survey included western scrub-jay, white-crowned sparrow (*Zonotrichia leucophrys*), common raven, and antelope ground squirrel (*Ammospermophilus* spp.).

3.1.4 Area 5: Boulevard Substation Rebuild Site

Area 5 includes the Boulevard Station rebuild site, and was considered to support potential suitable burrowing owl habitat based on its gentle slope, lack of vegetation, and presence of ground squirrel burrows. Representative photographs of the area are provided in Attachment A: Representative Photographs and a map of this area is provided in Map 5 of 5 in Attachment B: Suitable Burrowing Owl Habitat Maps. This area is approximately 10 acres in size and contains an unoccupied house, and abandoned garden and orchard areas. Although this site was once a place of residency, the area is no longer occupied by humans; therefore, activities which would discourage occupancy of the area by burrowing owl have ceased.

There are approximately eight mature interior live oak trees concentrated toward the southern portion of the property. Wildlife species observed during the habitat assessment field survey included mourning dove (*Zenaida macroura*), western scrub-jay, turkey vulture, and common raven.

4 – PHASE II: BURROW SURVEYS

Phase II: Burrow Surveys were conducted of the five suitable burrowing owl habitat areas identified during the Phase I: Habitat Assessment surveys. The following sections describe the methodology and results of the burrow surveys.

4.0 METHODOLOGY

From January 25 through 28, 2010, Insignia Environmental biologists Jeffry Coward and Nick Fisher conducted burrow surveys of the five suitable burrowing owl habitat areas in accordance with Phase II: Burrow Survey of the Protocol. The surveyors conducted pedestrian transects spaced no more than 100 feet apart, allowing for 100-percent visual coverage of the ground surface. In areas with undulating terrain and higher vegetation density, the distance between transect centerlines was reduced in order to maintain 100-percent visual coverage of the ground surface. The surveyors photographed and took Geographic Positioning System points of all

potential burrowing owl burrows. The surveyors also noted any sign of owl use—including white wash, feathers, prey remains, and pellets—at each of the potential burrows found during the burrow survey.

4.1 RESULTS

4.1.0 Area 1

On January 25, 26, and 28, Area 1 was surveyed for potential burrowing owl burrows. On January 25, 2010, from 10:00 a.m. to 4:00 p.m., the northern portion of Area 1 was surveyed. The temperature range during the survey was 57 to 66 degrees Fahrenheit, with winds from 10 to 15 miles per hour, no cloud cover, and excellent visibility. On January 26, 2010, from 7:00 a.m. to 4:00 p.m., the southern portion of the Area 1 was surveyed for potential burrowing owl burrows. The temperature range during the survey was 57 to 66 degrees Fahrenheit, with winds from 10 to 15 miles per hour, no cloud cover, and excellent visibility. On January 28, 2010, from 8:45 a.m. to 11:20 a.m., the temporary distribution line ROW and the 138 kV transmission line ROW portions of Area 1 were surveyed for potential burrowing owl burrows. The temperature range during the survey was 53 to 67 degrees Fahrenheit, with winds from five to 10 miles per hour, no cloud cover, and excellent visibility.

Area 1 is dominated by Mormon tea (*Ephedra aspera*), cholla cactus (*Opuntia* spp.), jojoba (*Simmondsia chinensis*), California juniper (*Juniperus californica*), desert agave (*Agave deserti*), water jacket (*Lycium andersonii*), lotebush (*Ziziphus parryi* var. *parryi*), and boundary goldenbush (*Ericameria brachylepis*). Mojave yucca (*Yucca schidigera*) and creosote bush (*Larrea tridentata*) also occur toward the west end of the site, while desert apricot (*Prunus fremontii*) occurs mostly toward the east end of the site. No permanent fresh water sources occur within one mile of Area 1.

Wildlife species observed during the field survey of Area 1 include red-tailed hawk, western scrub-jay, phainopepla, California thrasher, black-throated sparrow, turkey vulture, common raven, antelope ground squirrel, and side-blotched lizard. Numerous small mammal burrows—ranging in size from one to four inches—were observed, indicating presence of an adequate prey base to support burrowing owl.

Two potential burrowing owl burrows (Burrow #1 and Burrow #2) were observed within Area 1, as shown in Figure 2: Burrow Survey Results Map. Burrow #1 was observed on the western shoulder of a dirt access road running in a north-to-south direction along the eastern portion of the site. This burrow is approximately eight inches in diameter; no signs of burrowing owl use were observed. Burrow #2 is located along the north-facing slope of a small canyon in the western portion of Area 1. A burrowing owl was observed in front of Burrow #2 at 12:20 p.m. on January 25. Photographs of both burrows are provided in Attachment A: Representative Photographs.

4.1.1 Area 2

On January 27, 2010, from 11:50 a.m. to 2:10 p.m., Area 2 was surveyed for potential burrowing owl burrows. The temperature during the survey was 58 degrees Fahrenheit, with winds from two to three miles per hour, 100-percent high cloud cover, and excellent visibility.

Area 2 is dominated by low-growing non-native grasses and forbs with widely spaced mixed desert scrub plant species, including Mormon tea, cholla cactus, desert agave, and flat-top buckwheat (*Eriogonum fasciculatum*). In addition, saltbush (*Atriplex polycarpa*) was scattered throughout the southern portion of Area 2. Wildlife species observed during the field survey of this area include western scrub-jay, black-throated sparrow, common raven, and black-tailed jackrabbit. A few small mammal burrows, ranging in size from one to three inches, were observed. No permanent fresh water sources occur within one mile of Area 2.

No potential burrowing owl burrows or burrowing owls were observed during the survey of Area 2.

4.1.2 Area 3

On January 27, 2010, from 2:25 p.m. to 3:45 p.m., Area 3 was surveyed for potential burrowing owl burrows. The temperature during the survey was 62 degrees Fahrenheit, with winds from five to 10 miles per hour, 100-percent high cloud cover, and excellent visibility.

Area 3 is dominated by low-growing non-native grasses and forbs, including red-stemmed filaree (*Erodium cicutarium*) and common Mediterranean grass (*Schismus barbatus*). Area 3 also contains widely spaced mixed desert scrub plant species, including Mormon tea, cholla cactus, and desert agave. Wildlife species observed during the field survey of Area 3 include western scrub-jay, red-tailed hawk, black-throated sparrow, desert cotton tail (*Sylvilagus auduboni*), and antelope ground squirrel. No permanent fresh water sources occur within one mile of Area 3.

No potential burrowing owl burrows or burrowing owls were observed during the survey of Area 3.

4.1.3 Area 4

On January 27, 2010, from 7:00 a.m. to 8:45 a.m., the western portion of Area 4 was surveyed for potential burrowing owl burrows. The temperature during the survey was 50 degrees Fahrenheit, with winds from two to five miles per hour, 60-percent high cloud cover, and excellent visibility. On March 4, 2010, from 10:30 a.m. to 11:50 a.m., the eastern portion of Area 4 was surveyed for potential burrowing owl burrows. The temperature during the survey was 67 degrees Fahrenheit, with winds from zero to three miles per hour, 10-percent high cloud cover, and excellent visibility.

Area 4 is dominated by low-growing non-native grasses and forbs, including red-stemmed filaree and common Mediterranean grass. A few interior live oak trees (*Quercus wislizeni*) occur along the southern portion of the survey area and a small area of riparian scrub habitat occurs within the middle of the survey area. Plant species observed within the survey area include Jacumba milkvetch (*Astragalus douglasii* var. *perstrictus*), chamise (*Adenostoma fasciculatum*), ceanothus (*Ceanothus* spp.), and shiny-leaf yerba santa (*Eriodictyon trichocalyx* var. *lanatum*). In addition, a small agricultural field occurs along the southeastern edge of Area 4. Wildlife species observed during the field survey of Area 4 included western scrub-jay, red-tailed hawk, California towhee (*Pipilo crissalis*), side-blotched lizard, and California ground squirrel (*Spermophilus beecheyi*). No permanent fresh water sources occur within one mile of Area 4.

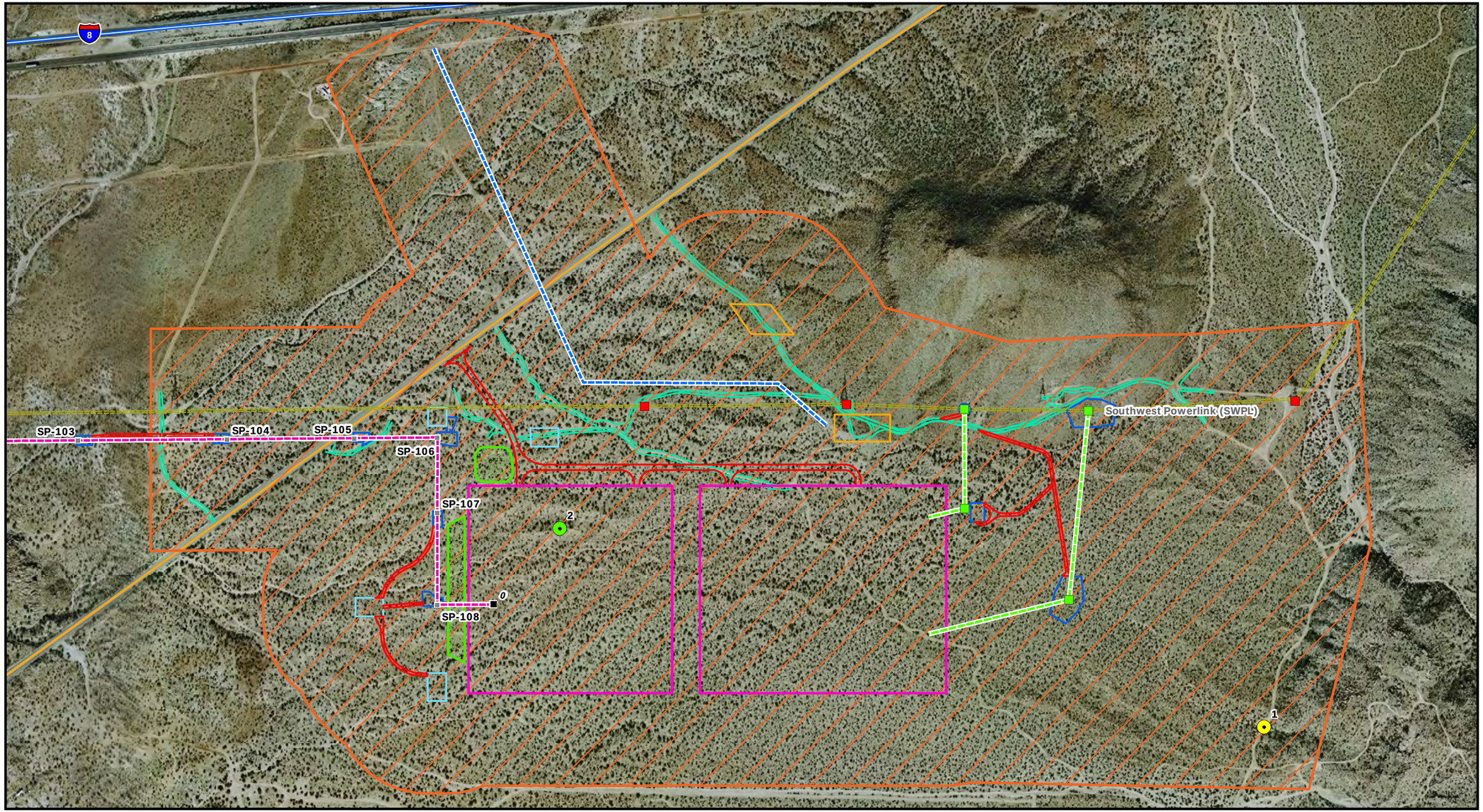

Figure 2: Burrow Survey Results Map

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing Access Road
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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No potential burrowing owl burrows or burrowing owls were observed during the survey of Area 4.

4.1.4 Area 5

On January 12, 2010, from 12:30 p.m. to 2:00 p.m., Area 5 was surveyed for potential burrowing owl burrows. The temperature during the survey was 68 degrees Fahrenheit, with winds from five to 10 miles per hour, five-percent high cloud cover, and excellent visibility.

Area 5 is approximately 10 acres in size, with eight small buildings, former garden and orchard areas, and other previously disturbed areas. There are approximately eight mature interior live oak trees concentrated toward the southern portion of the property. Other plant species observed included red-stemmed filaree, Jacumba milk-vetch, foxtail chess (*Bromus madritensis* ssp. *rubens*), and cheat grass (*Bromus tectorum*). Wildlife species observed included mourning dove, Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western scrub-jay, common raven, and western bluebird (*Sialia mexicana*). No permanent fresh water sources occur within one mile of Area 5.

No potential burrowing owl burrows or burrowing owls were observed during the survey of Area 5.

5 – PHASE III: BURROWING OWL SURVEYS

Phase III: Burrowing Owl Surveys were conducted of the two suitable burrows identified during the Phase II: Burrow Surveys. Both winter and spring burrowing owl surveys were conducted of the two potential burrowing owl burrows. The following sections describe the methodology and results of the burrowing owl surveys.

5.0 METHODOLOGY

From January 25 through 28, 2010, Insignia Environmental biologists Jeffry Coward and Nick Fisher conducted winter burrowing owl surveys of the two suitable burrows (Burrow #1 and Burrow #2), in accordance with Phase III: Burrowing Owl Survey of the Protocol. The locations of these burrows are displayed on Figure 2: Burrow Survey Results Map. Surveys were conducted between two hours before sunset to one hour after sunset, or from one hour before sunrise to two hours after sunrise. The burrows were observed using binoculars from several fixed positions, to determine presence or absence of burrowing owls. The burrows were also examined for owl signs if no owls were observed.

On April 16, and April 19 through 21, 2010, Insignia Environmental biologists Jeffry Coward and Danielle Muir conducted spring burrowing owl surveys of the two suitable burrows (Burrow #1 and Burrow #2), in accordance with Phase III: Burrowing Owl Survey of the Protocol. Surveys were conducted between two hours before sunset to one hour after sunset, or from one hour before sunrise to two hours after sunrise. The burrows were observed using binoculars from several fixed positions, to determine presence or absence of burrowing owls. The burrows were also examined for owl signs if no owls were observed.

5.1 WINTER SURVEY RESULTS

5.1.0 Burrow #1

The following surveys of Burrow #1 were conducted in accordance with the wintering burrowing owl surveys as stated in the Protocol:

- On January 25, 2010, from 3:50 p.m. to 4:40 p.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 55 degrees Fahrenheit, with winds from 10 to 15 miles per hour, 40-percent cloud cover, and excellent visibility.

- On January 26, 2010, from 3:45 p.m. to 4:40 p.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 50 degrees Fahrenheit, with winds from five to 10 miles per hour, 30-percent cloud cover, and excellent visibility.

- On January 27, 2010, from 6:45 a.m. to 7:50 a.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 41 degrees Fahrenheit, with winds from zero to five miles per hour, 100-percent cloud cover, and excellent visibility.

- On January 28, 2010, from 6:55 a.m. to 7:45 p.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 41 degrees Fahrenheit, with winds from zero to five miles per hour, 100-percent cloud cover, and excellent visibility.

During each survey, Burrow #1 was observed through binoculars from several fixed positions located approximately 300 feet south, 250 feet east, and 250 west of the burrow. No burrowing owls were observed during the four surveys. After each survey, the burrow was then examined for owl signs; no owl signs were observed.

5.1.1 Burrow #2

The following surveys of Burrow #2 were conducted in accordance with the wintering burrowing owl surveys as stated in the Protocol:

- On January 25, 2010, from 4:45 p.m. to 5:40 p.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 51 degrees Fahrenheit, with winds from five to 10 miles per hour, 40-percent cloud cover, and excellent visibility.

- On January 26, 2010, from 4:45 p.m. to 4:50 p.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 47 degrees Fahrenheit, with winds from five to 10 miles per hour, 30-percent cloud cover, and excellent visibility.

- On January 27, 2010, from 7:55 a.m. to 8:45 a.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 47 degrees Fahrenheit, with winds from zero to five miles per hour, 100-percent cloud cover, and excellent visibility. No burrowing owls were observed within the burrow or the surrounding area.

- On January 28, 2010, from 6:55 a.m. to 7:45 p.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Nick Fisher. The temperature during the survey was 45 degrees Fahrenheit, with winds from zero to five miles per hour, 100-percent cloud cover, and excellent visibility. No burrowing owls were observed within the burrow or the surrounding area.

During each of these surveys, the burrow was observed through binoculars from several fixed positions located approximately 250 feet east, 300 feet northwest, and 300 feet north of the burrow. One burrowing owl was observed foraging west and south of Burrow #2 on January 25, 2010. At approximately 5:10 p.m., the burrowing owl continued to forage further west of the burrow and the surveyors lost visual contact with the burrowing owl. The burrowing owl did not enter or perch near Burrow #2 during the survey period. One burrowing owl was observed within Burrow #2 on January 26, 2010. The burrowing owl was not observed leaving the burrow during the survey. No other burrowing owls were observed during the wintering surveys.

5.2 SPRING SURVEY RESULTS

5.2.0 Burrow #1

The following surveys of Burrow #1 were conducted in accordance with the spring burrowing owl surveys as stated in the Protocol:

- On April 16, 2010, from 7:35 a.m. to 8:30 a.m., Burrow #1 was surveyed by Insignia Environmental biologist Jeffry Coward. The temperature during the survey was 49 degrees Fahrenheit, with winds from zero to two miles per hour, no cloud cover, and excellent visibility.

- On April 19, 2010, from 6:05 p.m. to 6:45 p.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Danielle Muir. The temperature during the survey was 70 degrees Fahrenheit, with winds from five to 10 miles per hour, no cloud cover, and excellent visibility.

- On April 20, 2010, from 7:45 a.m. to 8:30 a.m., Burrow #1 was surveyed by Insignia Environmental biologists Jeffry Coward and Danielle Muir. The temperature during the survey was 48 degrees Fahrenheit, with winds from five to 10 miles per hour, no cloud cover, and excellent visibility.

- On April 21, 2010, from 7:25 a.m. to 8:30 a.m., Burrow #1 was surveyed by Insignia Environmental biologist, Danielle Muir. The temperature during the survey was 40 degrees Fahrenheit, with winds from 10 to 20 miles per hour, 100-percent high cloud cover, and excellent visibility.

The burrow was observed through binoculars from several fixed positions located approximately 300 feet south, 250 feet east, and 250 west of the burrow. No burrowing owls were observed during the four surveys. After each survey, the burrow was then examined for owl signs; no owl signs were observed.

5.2.1 Burrow #2

The following surveys of Burrow #2 were conducted in accordance with the spring burrowing owl surveys as stated in the Protocol:

- On April 16, 2010, from 6:40 a.m. to 7:30 a.m., Burrow #2 was surveyed by Insignia Environmental biologist Jeffry Coward. The temperature during the survey was 49 degrees Fahrenheit, with winds from zero to two miles per hour, no cloud cover, and excellent visibility.

- On April 19, 2010, from 5:30 p.m. to 6:15 p.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Danielle Muir. The temperature during the survey was 70 degrees Fahrenheit, with winds from five to 10 miles per hour, no cloud cover, and excellent visibility.

- On April 20, 2010, from 7:00 a.m. to 7:40 a.m., Burrow #2 was surveyed by Insignia Environmental biologists Jeffry Coward and Danielle Muir. The temperature during the survey was 48 degrees Fahrenheit, with winds from five to 10 miles per hour, no cloud cover, and excellent visibility.

- On April 21, 2010, from 6:45 a.m. to7:20 a.m., Burrow #2 was surveyed by Insignia Environmental biologist Danielle Muir. The temperature during the survey was 40 degrees Fahrenheit, with winds from 10 to 20 miles per hour, 100-percent high cloud cover, and excellent visibility.

During each of the surveys, Burrow #2 was observed through binoculars from several fixed positions located approximately 250 feet east, 300 feet northwest, and 300 feet north of the burrow. No burrowing owls were seen during any of these surveys. During the initial survey on April 16, 2010, after review of the burrow for owl signs, the biologist noted old whitewash and skeletal prey; however, no fresh owl signs were observed. After the conclusion of the remaining three surveys, the same whitewash and skeletal prey remains were observed; however, no new owl signs were found.

6 – CONCLUSION

In December 2009, one burrowing owl was observed by a SDG&E biological monitor near Burrow #2. It is likely that the one burrowing owl observed during the first two wintering burrowing owl surveys conducted on January 25 and January 26, 2010 was the same owl observed in 2009 because all three observations were located within several hundred feet of each other. In addition, no more than one owl was observed at one time. This burrowing owl was likely a winter transient that was migrating through the area. The conclusion that the Proposed Project does not support resident or breeding burrowing owls is verified by the results of these

surveys, which found a lack of burrowing owl observations during the last two wintering surveys and any of the spring protocol-level surveys, and an absence of any new owl signs during the spring surveys. In addition, there is a lack of historical records of burrowing owls occurring in the area. While Area 1 of the Proposed Project did support one wintering transient burrowing owl during the winter of 2009/2010, this occurrence is thought to be unusual and rare, based on the lack of historical records of burrowing owls in the area.

7 – RECOMMENDATIONS

Due to the potential presence of wintering burrowing owls located within Area 1 of the Proposed Project, SDG&E will conduct preconstruction bird surveys of the Proposed Project area. If a burrowing owl is observed utilizing a burrow during the preconstruction surveys, SDG&E, in consultation with the CDFG, will maintain an appropriate buffer around the burrow(s) until the burrowing owl migrates from the area. In addition, SDG&E will have a qualified biologist monitor the occupied burrow to ensure that Proposed Project activities do not disrupt normal behavior of the burrowing owl.

8 – REFERENCES

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ATTACHMENT A: REPRESENTATIVE PHOTOGRAPHS

Photograph 1: Typical suitable habitat with low-growing grasses and forbs

Photograph 2: Typical suitable habitat with low-growing vegetation and scattered shrubs

Photograph 3: Typical non-suitable habitat with a high density of taller vegetation

Photograph 4: Typical non-suitable habitat with dense vegetation and rock outcrops

Photograph 5: Suitable habitat within Area 1

Photograph 6: Overview of ECO Substation site (Area 1)

Photograph 7: Suitable habitat within Area 2

Photograph 8: Suitable habitat within Area 3

Photograph 9: Suitable habitat within Area 4

Photograph 10: Suitable habitat within Area 5

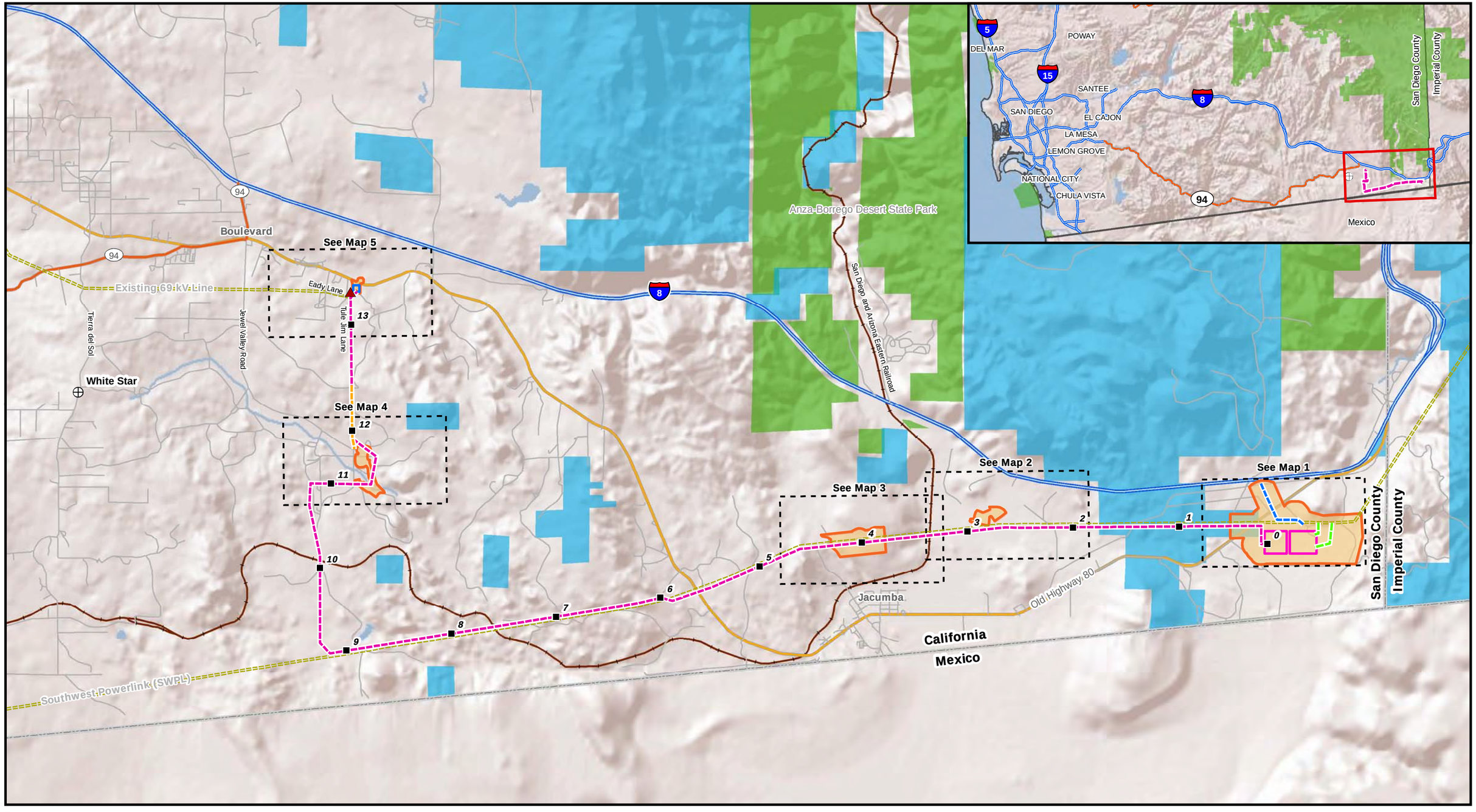
Photograph 11: Burrow #1 with no owl signs

Photograph 12: Burrow #2 with whitewash at the entrance

ATTACHMENT B: SUITABLE BURROWING OWL HABITAT MAPS

Attachment B: Suitable Burrowing Owl Habitat Overview Map

East County Substation Project



- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Existing Boulevard Substation
- Proposed 138 kV Line Milepost
- Communication Facility
- Bureau of Land Management
- California State Park
- Suitable Burrowing Owl Habitat
- Map Sheet
- Interstate
- Highway
- Local Road
- Major Road
- Railroad

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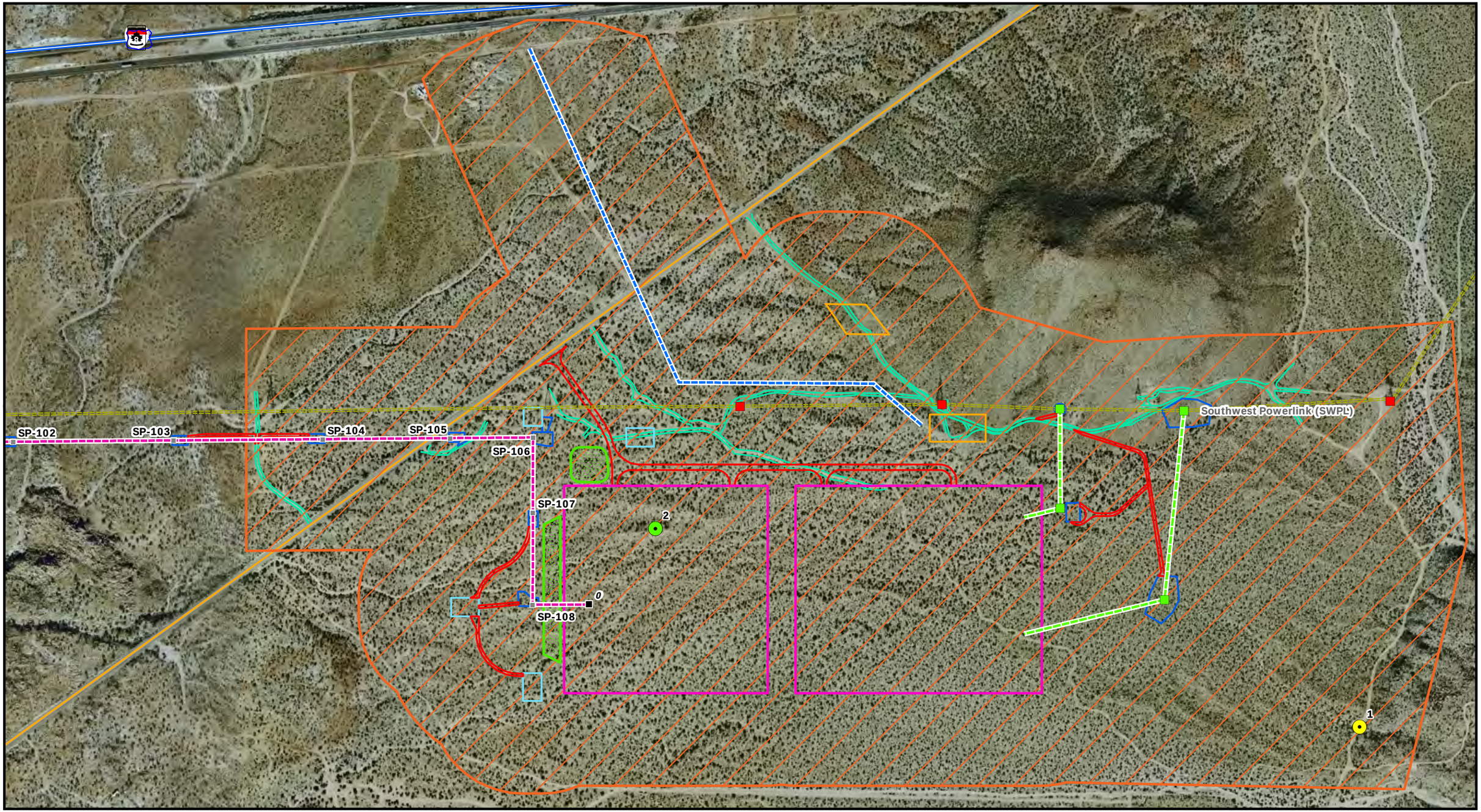

Attachment B: Suitable Burrowing Owl Habitat Map 1 of 5 - Area 1

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Existing Boulevard Substation
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- Existing Access Road
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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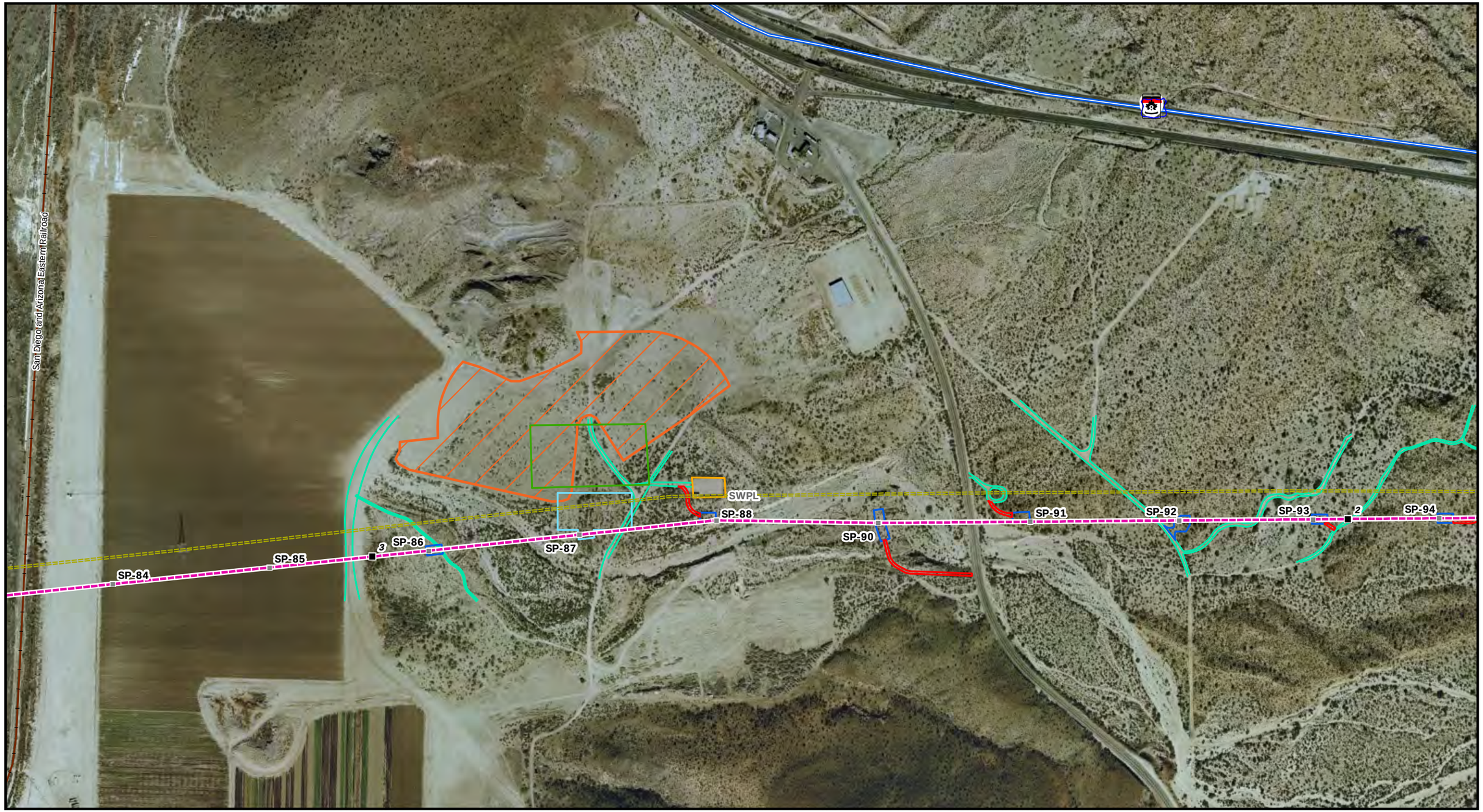

Attachment B: Suitable Burrowing Owl Habitat Map 2 of 5 - Area 2

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Existing Boulevard Substation
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- Existing Access Road
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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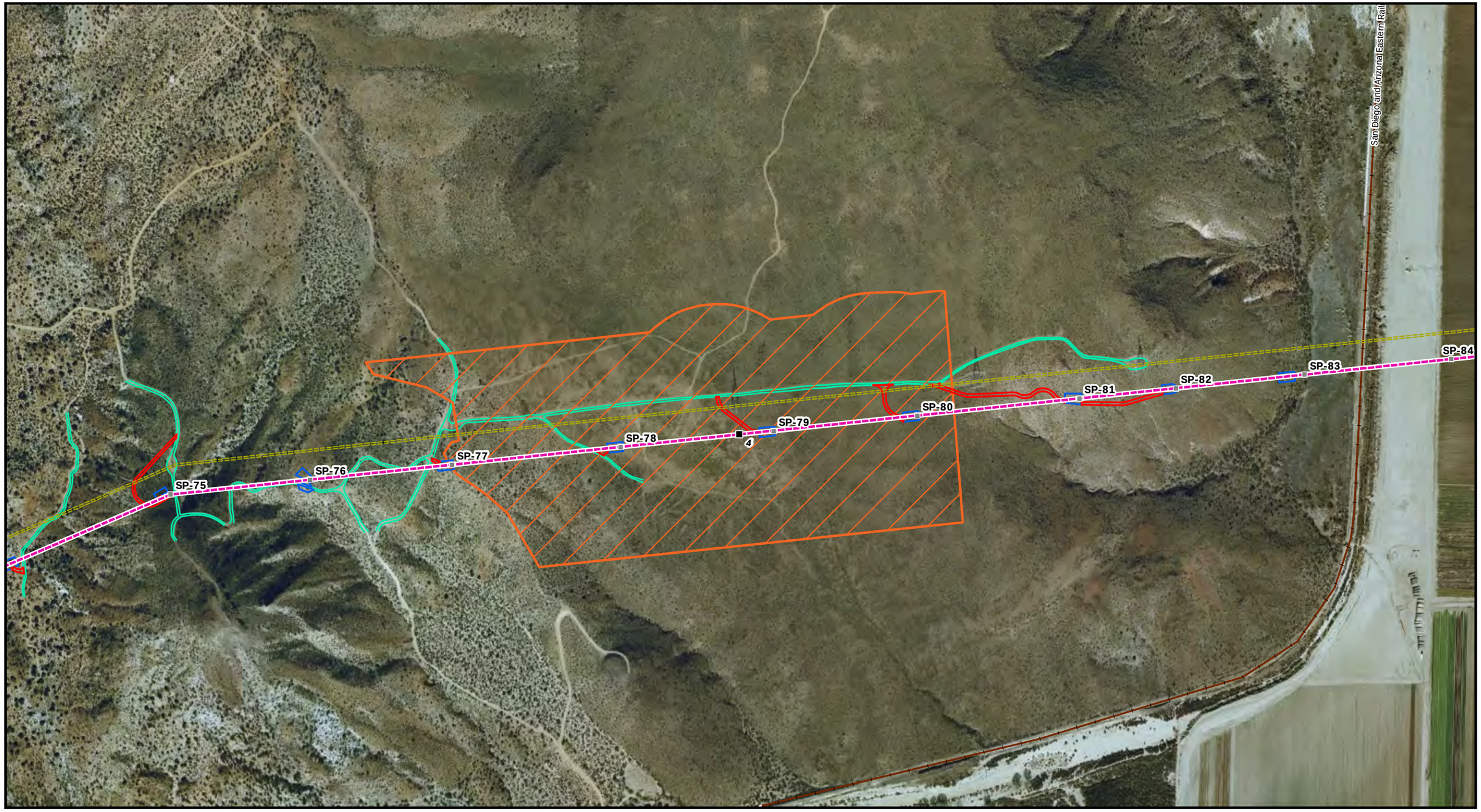
Attachment B: Suitable Burrowing Owl Habitat Map 3 of 5 - Area 3

East County Substation Project



- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Existing Boulevard Substation
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- Existing Access Road
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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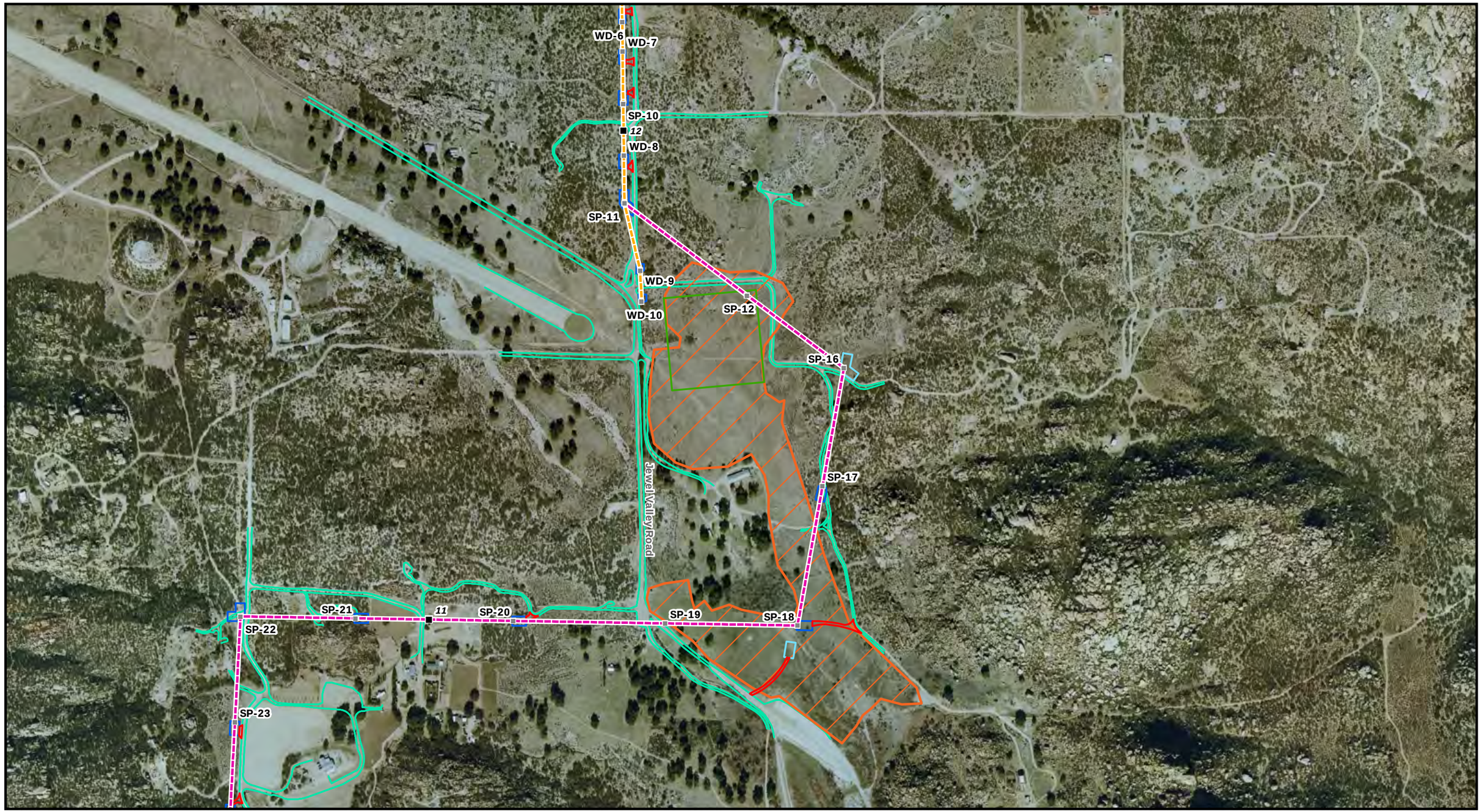

Attachment B: Suitable Burrowing Owl Habitat Map 4 of 5 - Area 4

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Existing Boulevard Substation
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- Existing Access Road
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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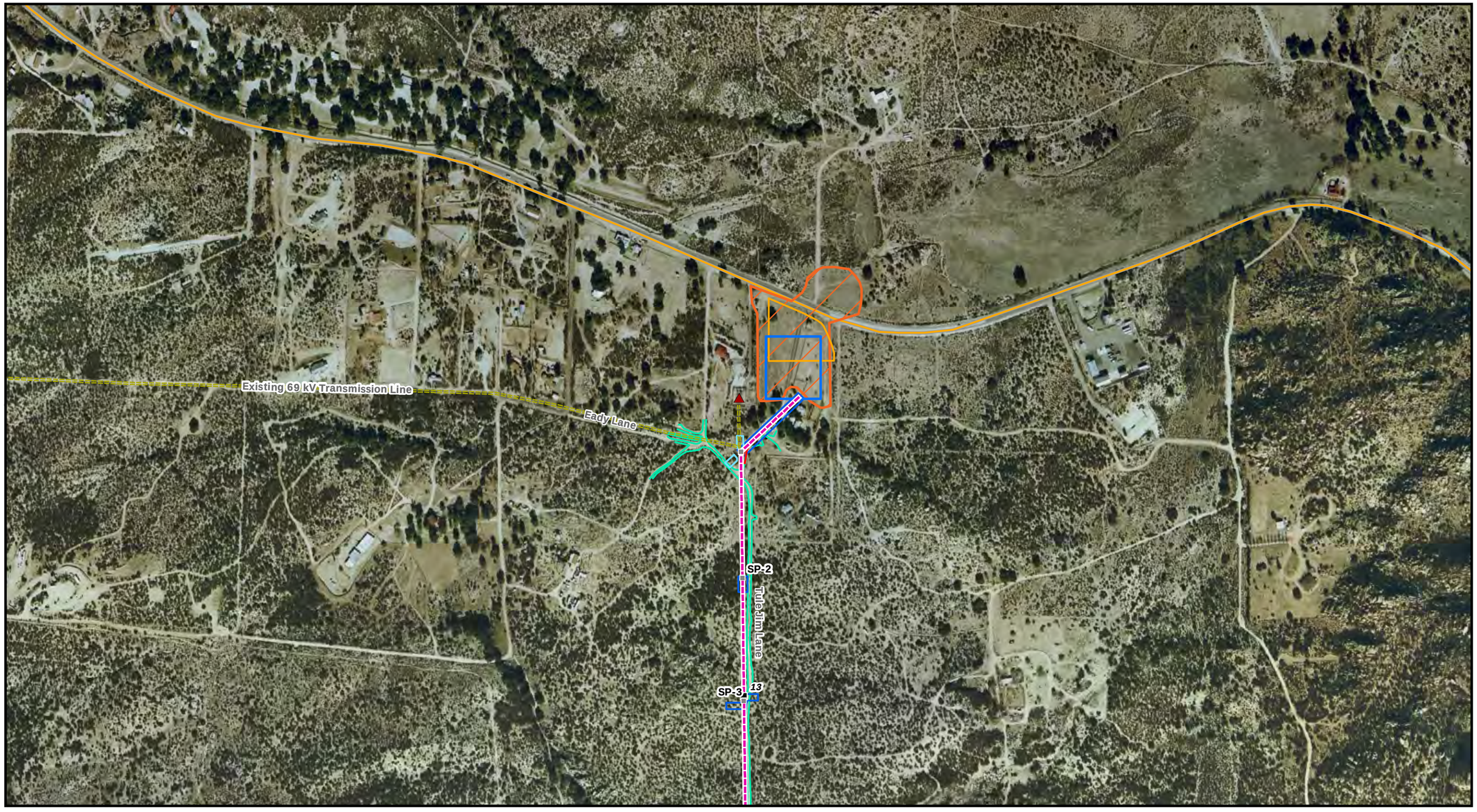

Attachment B: Suitable Burrowing Owl Habitat Map 5 of 5 - Area 5

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Existing Boulevard Substation
- Proposed ECO Substation
- Boulevard Substation Rebuild
- Retention Pond
- Proposed 138 kV Tower
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- Existing Access Road
- New Access Road
- Staging Yard
- Pull Site
- Fly Yard
- Temporary Work Area
- Suitable Burrowing Owl Habitat
- Burrow
- Burrow/Burrowing Owl Sighting

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