

October 17, 2006

Baltazar Mejia, Sr. Engineer
 City of Costa Mesa
 77 Fair Drive
 Costa Mesa, CA 92628

Subject: Burrowing Owl Survey Report, Fairview Park, City of Costa Mesa, California

Dear Mr. Mejia:

LSA Associates, Inc. (LSA) is pleased to submit this summary report for winter and breeding season burrowing owl (*Athene cunicularia*) surveys at Fairview Park (Park) in the City of Costa Mesa, Orange County, California (Figure 1). Burrowing owls are a United States Fish and Wildlife Service (USFWS) bird of conservation concern (BCC) and a California Department of Fish and Game (CDFG) California special concern species (CSC). Four focused survey visits were completed in the winter of 2005 and followed the recommended guidelines prepared by the California Burrowing Owl Consortium (CBOC).¹ Spring surveys were completed in 2006 in conjunction with additional LSA surveys throughout the study area.

In December 2005, LSA observed two wintering burrowing owls during two of the four survey visits. These two burrowing owls were observed adjacent to and in nearby burrows in the ruderal field between the model railroad station and the new (2005–2006) footbridge over Placentia Avenue. No burrowing owls were observed during the LSA breeding season surveys.

Wintering burrowing owl surveys have been conducted in this area previously with both positive and negative results. In December 2003, Glenn Lukos Associates conducted focused winter surveys east of Placentia Avenue with negative findings; however, in 2002, they reported a single wintering burrowing owl east of Placentia Avenue in suitable habitat in a small ravine, which had become overgrown and degraded by the time of their survey in December 2003.²

STUDY AREA

LSA conducted two sessions of burrowing owl surveys within Fairview Park. The Park is just over 200 acres and straddles Placentia Avenue at 2501 Placentia Avenue in the coastal city of Costa Mesa in Orange County, California (Figure 1). This study area is approximately 2.5 miles from the Pacific Ocean and west of State Route 55 (SR-55), with Adams Avenue to the north and Victoria Street to the south. Immediately adjacent to Fairview Park is a residential community to the north, the Costa Mesa Golf Course to the east, and Marion Parsons School and Estancia High School to the south. Talbert Nature Preserve abuts the western edge of Fairview Park, with the Santa Ana River and the City of Huntington Beach further to the west. The western portion of Fairview Park is atop a bluff near the Santa Ana River.

¹ California Burrowing Owl Consortium. Burrowing Owl Survey Protocol and Mitigation Guidelines. April 1993.

² Glenn Lukos Associates. Results of Wintering Burrowing Owl Surveys, Fairview Park, City of Costa Mesa, California. December 29, 2003.

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Date 2005	Time	Conditions	No. of Owls; Owl Sign	Surveyors
May 31	0815–1100	Partly cloudy, mild, light air	None	MI
June 7	0630–0830	Overcast, mild, calm	None	RE, PS
June 20	0830–1400	Overcast–clearing, mild, light air–light breeze	None	IB, SS

Beaufort Scale and seaman's terms are used to describe the wind speed.

Surveyors: IB: Ingri Baroni; LD: Liz Delk; LS: Leo Simone; MI: Marshall Iliff; MW: Michael Weller; PS: Paul Schwartz; RE: Richard Erickson; SS: Stan Spencer

The surveys for burrowing owls implemented a transect method using one or two biologists spaced to allow for complete visual coverage of the ground. This technique was used in the grassland and ruderal areas that had sparse vegetation and open areas. The densely vegetated ruderal and sage scrub communities were surveyed along their periphery, with excursions into the dense vegetation to look for burrows.

According to the CBOC guidelines, occupied burrowing owl burrows are determined by either observing a burrowing owl at the burrow or finding owl sign including molted feathers, cast pellets, prey remains, and/or excrement at or near the burrow entrance or finding a hole of suitable size that did not have cobwebs across the entrance.

RESULTS

Two burrowing owls were found at burrows in the study area in the winter of 2005 (Figure 2). Two burrowing owls were observed on December 21 and 22, 2005, in the flat, ruderal habitat associated with the model railroad and station. There were also several areas with potentially useable burrows. Most of these burrows were observed along the east side of Placentia Avenue in the area north of Fairview Channel and in the flat, ruderal habitat associated with the model railroad. With the exception of the burrows being actively used by the two burrowing owls, the potential burrows did not have sign of owl use or occupation but could be modified by an owl for future use. Many of the potential burrowing owl burrows were being used by California ground squirrels (*Spermophilus beecheyi*). The burrows being used by the owls in 2005 appeared to have been former ground squirrel burrows.

One reason burrowing owls may not have been detected within Fairview Park during the 2006 breeding season was the change in the seasonal vegetation conditions. In the spring of 2006, much of the area was heavily overgrown with tall, nonnative vegetation, including black mustard and sweet fennel. In the spring of 2006, the area that formerly had the two burrowing owls at burrows in December 2005 was densely vegetated with black mustard and sweet fennel (approximately 4–6 feet tall). Other areas within the study area were also heavily vegetated with similar ruderal vegetation including the lower sandy area just south of the Fairview Channel and west of Placentia Avenue and the west mesa. Burrowing owls generally are associated with open fields where visibility is unobscured. Winter conditions had low-growing vegetation, which allowed for suitable visibility for ground dwelling (i.e., fossorial) owls. It should be noted that the ruderal vegetation within Fairview Park is occasionally cut and/or disked as part of maintenance.

Based on surveys in 2005 and 2006, and prior observations in 2002 and 2003, burrowing owls appear to be using Fairview Park for over-wintering during migration. There is also potential for year-round (i.e., breeding) use based on the presence of suitable open flat or gently rolling-hill topography. The

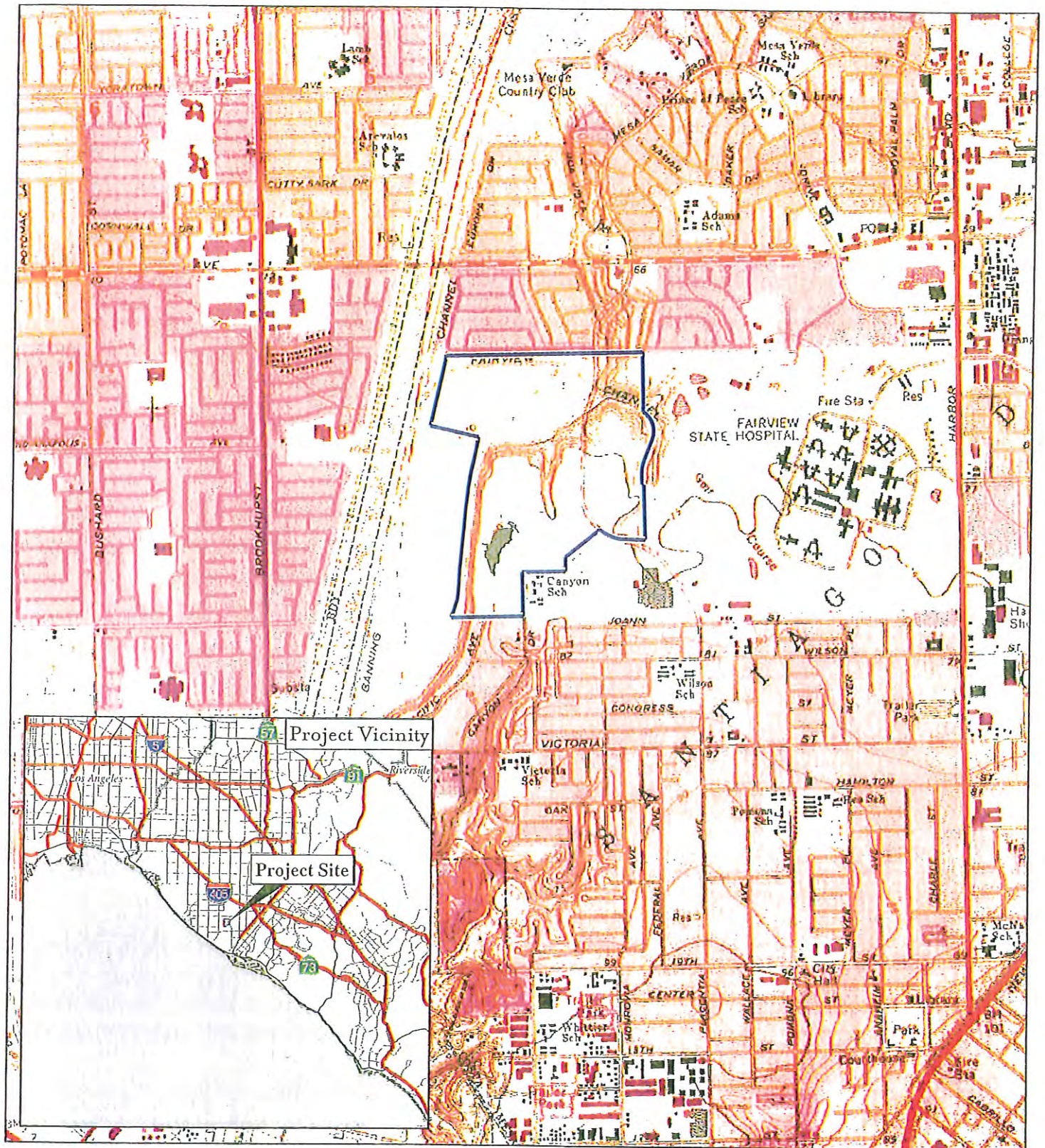
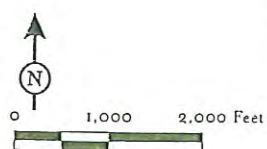


FIGURE 1

Fairview Park

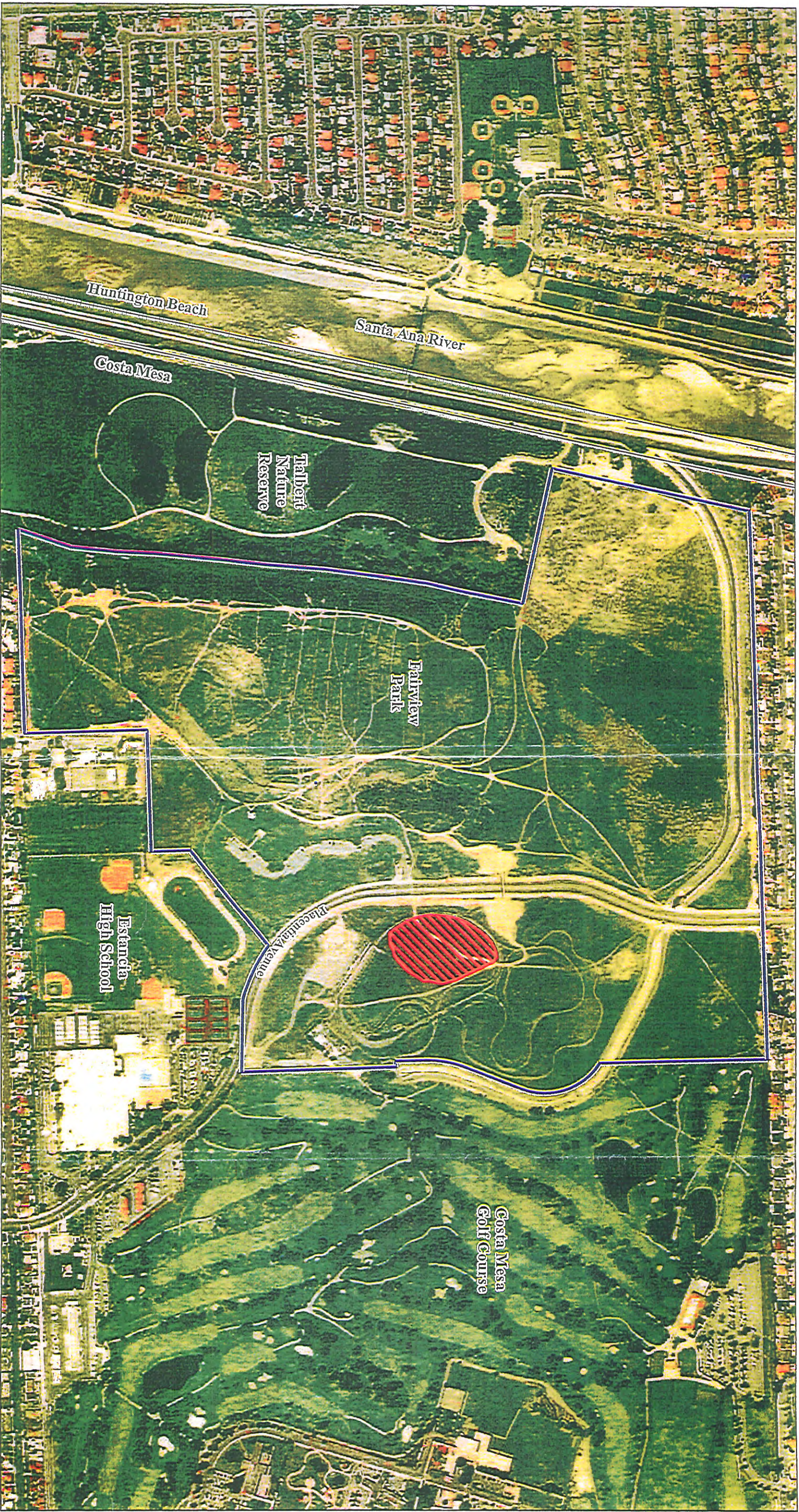
Project Location Map

LSA



- Approximate Project Boundary
- Vernal Pool Location

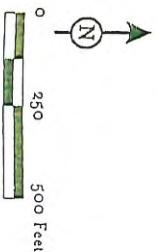
SOURCE: USGS 7.5' QUAD, NEWPORT BEACH, CA (1981)
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LSA

LEGEND

- Approximate Project Boundary
- Burrowing Owl Area



SOURCE: EagleAerial (4/06), LSA (5/06)

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FIGURE 2

2005 Burrowing Owl Wintering Area

Fairview Park

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area would be more suitable for both over-wintering and potential year-round use by owls if ruderal vegetation were cleared in the early spring before it becomes tall and creates unsuitable conditions for burrowing owls and if the area remained relatively undisturbed by predatory animals and human activity.

Please contact Art Homrighausen or me at (949) 553-0666 if you have any questions regarding this report.

Sincerely,

LSA ASSOCIATES, INC.

A handwritten signature in cursive script, reading "Ingri Baroni".

Ingri Baroni
Biologist

cc: Chris Webb, Moffatt & Nichol

Attachments: Figure 1: Project Location
Figure 2: Burrowing Owl Wintering Use Area