

APPENDIX B

BIOLOGICAL RESOURCES SURVEYS

This page intentionally left blank

MEMORANDUM

DATE: December 2, 2019, 2019

To: City of Long Beach

FROM: Lonnie Rodriguez

SUBJECT: Biological Nest and Nesting Bird Survey for the Belmont Plaza Pool Revitalization Project, Long Beach, California

On September 30, 2019, LSA biologist Lonnie Rodriguez conducted a biological survey within and adjacent to the area for the proposed Belmont Plaza Pool Revitalization Project (project), located at 4000 East Olympic Plaza, Long Beach, California. The purpose of the survey was to identify any new nest or roosting (perching in order to rest or sleep) locations and to compare/summarize the results with those of past surveys conducted for the proposed project.

The survey consisted of Mr. Rodriguez inspecting the trees and structures on site and adjacent to the project area for nests (nesting material) and whitewash (excrement) within, on, or around the trees or structures. Information regarding the nest locations or signs of roosting found during the 2019 survey and for the years 2013, 2014, and 2015 is included in Table A (attached). A map of the nest and roosting locations is provided as Figure 1 (attached). Survey results from 2013, 2014, and 2015 only identified trees where nests were present or evidence of roosting was observed. Similarly, the results from the 2019 survey (Figure 1) only identify trees where evidence of nesting and/or roosting was observed. For the years 2016 through 2018, surveys were not conducted, because the project was in the planning and development stage, and no preconstruction surveys were warranted. The 2019 survey was conducted during the nonbreeding season (October through December).

The summary of the results found 15 locations (1 structure and 14 trees) with evidence of nesting and/or roosting for the years 2013, 2014, 2015, and 2019. Trees within the project area that have been used for breeding and nesting or have a nest that has been used within the past 5 years are protected under an existing Coastal Development Permit (CDP 5-08-187) and shall not be removed or disturbed during the breeding and nesting season unless a health-and-safety danger exists. Pursuant to the existing requirements in CDP 5-08-187, the removal of any breeding and nesting tree requires replacement at a 1:1 ratio. A Tree Replacement Planting Plan is required under CDP 5-08-187 for each tree to be replaced and must specify the replacement tree location, tree type, tree size (no less than 36" box size), planting specifications, and include a five-year monitoring program inclusive of specific performance standards. Consultation with the California Coastal Commission

regarding these existing requirements should occur prior to construction activities for any trees that are planned for removal and that have had active nests within the past 5 years.

While hummingbirds have not been identified nesting on the site, hummingbird species have the potential to nest during both the breeding and the non-breeding season. Therefore, Mitigation Measure 4.3.1, as required in the 2016 Certified EIR for the Approved Project, has been expanded to require surveys during the non-breeding season, in order to avoid any possible impact to hummingbirds. If an active nest is found the nest will be monitored by a qualified biologist until the nest is no longer active. The modified mitigation measure is included below.

Mitigation Measure 4.3.1: **Migratory Bird Treaty Act.** Tree and vegetation removal shall be restricted to outside the likely active nesting season (January 15 through September 1) for those bird species present or potentially occurring within the proposed Project area. That time period is inclusive of most other birds' nesting periods, thus maximizing avoidance of impacts to any nesting birds. ~~If construction is proposed between January 15 and September 1, a~~ qualified biologist familiar with local avian species and the requirements of the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code shall conduct a preconstruction survey for nesting birds no more than 3 days prior to construction during both the non-breeding and breeding seasons. The survey shall include the entire area that will be disturbed. The results of the survey shall be recorded in a memorandum and submitted to the City of Long Beach (City) Parks, Recreation, and Marine Director within 48 hours. If the survey is positive, and the nesting species are subject to the MBTA or the California Fish and Game Code, the memorandum shall be submitted to the California Department of Fish and Wildlife (CDFW) to determine appropriate action. If nesting birds are present, a qualified biologist shall be retained to monitor the site during initial vegetation clearing and grading, as well as during other activities that would have the potential to disrupt nesting behavior. The monitor shall be empowered by the City to halt construction work in the vicinity of the nesting birds if the monitor believes the nest is at risk of failure or the birds are excessively disturbed.

Attachments: Table A: Belmont Plaza Pool Revitalization Project Biological Survey Results
Figure 1: Biological Survey of Nests and Roosting Locations

Table A: Belmont Plaza Pool Revitalization Project Biological Survey Results

Nest Locations (see Figure 1)	2013	2014	2015	2019	Observations
1	Nest	Nest	None	None	Nonnative European starlings and house sparrows observed nesting in 2013; nesting material observed but no active nest seen in 2014; no nesting/roosting observations in 2015 or 2019.
2	Nest	None	None	None	Nesting material seen in 2013; no nesting activity observed in 2014; no nesting/roosting observations in 2015 or 2019.
3	Whitewash	None	None	None	Whitewash seen in tree, suggesting roosting, but no nest observed in 2013; no evidence of recent roosting (whitewash) in 2014; no nesting/roosting observations in 2015 or 2019.
4	Nest	Nest	None	None	Nest observed but species not identified in 2013; nest observed but no birds seen occupying or visiting the nest in 2014; no nesting/roosting observations in 2015 or 2019.
5	Nest	Nest	None	None	Three nests observed, including one active black-crowned night-heron nest, in 2013; nesting material observed but no birds seen constructing the nest or flying into the tree in 2014; no nesting/roosting observations in 2015 or 2019.
6	Nest	Nest	None	None	One black-crowned night-heron nest observed in 2013; black-crowned night-heron roosting and nesting material observed but no birds seen occupying or visiting the nest in 2014; no nesting/roosting observations in 2015 or 2019.
7	Nest	None	None	None	One black-crowned night-heron nest in 2013; no nesting/roosting observations in 2014, 2015, or 2019.
8	Nest	Nest	Nest	None	One black-crowned night-heron nest in 2013; evidence of recent roosting (whitewash) but no birds observed roosting, and nesting material observed but no birds occupying the nest or visiting the nest, in 2014; black-crowned night-heron and snowy egret observed nesting in 2015; no nesting material or whitewash observed in the tree in 2019.
9	None	Nest	None	None	No nesting observed in 2013; evidence of whitewash but no roosting observed in 2014; no nest/roosting observations in 2015 or 2019.
10	None	None	Nest	None	No nest or nesting observations in 2013 and 2014; sticks observed in the palm tree in 2015; no nest or nesting observations in 2019.
11	None	None	None	Nest	No nest or nesting observations in 2013, 2014, and 2015; stick nest seen in 2019, tree located on sidewalk.
12	None	None	None	Nest	No nest or nesting observations in 2013, 2014, and 2015; stick nest seen in 2019, tree located on sidewalk.
13	None	None	None	Nest	No nest or nesting observations in 2013, 2014, and 2015; stick nest seen in 2019, tree located on sidewalk.
14	None	None	None	Nest	No nest or nesting observations in 2013, 2014, and 2015; stick nest seen in 2019, tree located on sidewalk
15	None	None	None	Nests	Nests identified in this tree for multiple years, starting in and potentially earlier than 2017; nests seen in 2019.

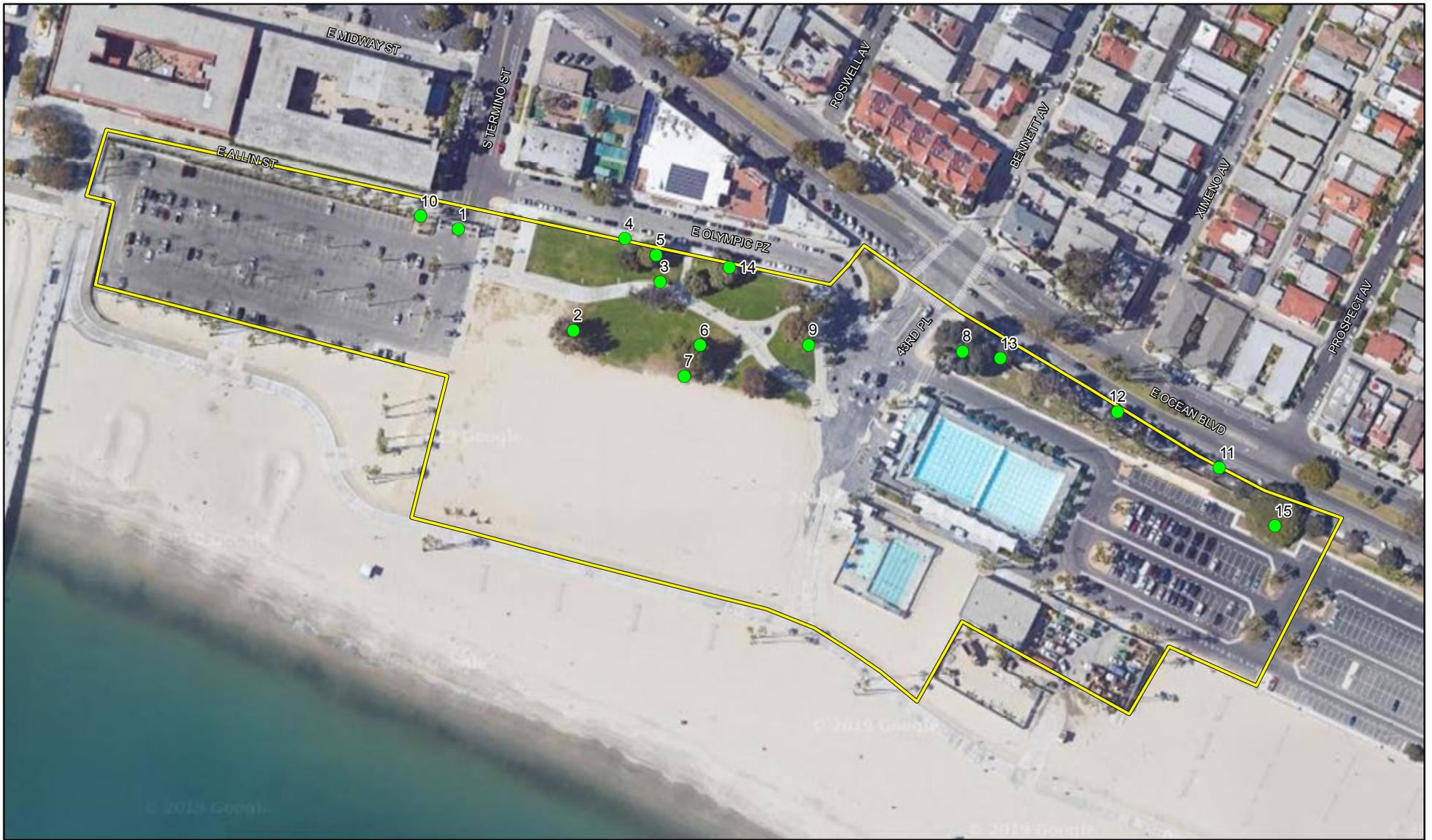
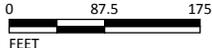


FIGURE 1

LSA

LEGEND

- Tree Location
- Survey Area



SOURCE: Google (3/2018); LSA (10/2019)
 I:\CLB1904.05\GIS\MXD\NestLocations.mxd (10/4/2019)

Belmont Pool Revitalization Project
 Biological Survey of Nests and Roosting Locations

MEMORANDUM

DATE: November 22, 2019

To: City of Long Beach

FROM: Jill Carpenter

SUBJECT: Results of Preconstruction Focused Bat Survey for the Belmont Plaza Pool Revitalization Project, Long Beach, California

This letter documents the results of a focused preconstruction bat survey performed on October 3, 2019, for the proposed Belmont Plaza Pool Revitalization Project (project) at 4000 East Olympic Plaza, Long Beach, California. The mature ornamental trees within the project area have the potential to be used by a variety of bat species for roosting; consequently, LSA performed a focused survey to determine whether roosting bats are present in any of the trees in advance of the tree removal activities that will take place as part of the project. During this focused preconstruction survey, the trees within the project area were assessed for their potential to house roosting bats, and suitable trees were watched for emerging bats at dusk to determine whether they are occupied by roosting bats.

BAT NATURAL HISTORY AND REGULATORY FRAMEWORK

Bats are the primary predators of nocturnal flying insects and are largely adapted to a variety of habitats. Bat populations are generally declining throughout Southern California due to various factors, including loss of natural roosting and foraging habitats, exposure to pesticides and pathogens, and extermination (Johnston et al. 2004; Miner and Stokes 2005). Because bats have low reproductive turnover (most species have only one young per year, and only a few species have twins or multiple births) and high juvenile mortality, it can take many years for a colony of bats to recover from any impacts that result in mortality or even in a decrease in reproductive ability.

Day roosts protect bats from predators and the elements during the day while they are resting and/or rearing their young. Examples of day-roosting sites include, but are not limited to, human-made structures, trees, cliff or rock crevices, caves, and mines. Some types of day roosts where bats are particularly vulnerable to disturbance include maternity colonies, where female bats congregate in the spring and summer months to give birth and raise young, and hibernacula, where bats enter a period of hibernation during the winter months.

Various regulations afford protections to bats, which are classified as indigenous nongame mammal species regardless of their status under the State or federal Endangered Species Acts. These regulations include Title 14, Section 251.1, of the California Code of Regulations, which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior

patterns, including breeding, feeding, or sheltering) of nongame mammals (e.g., bats), and California Fish and Game Code Section 4150, which prohibits “take”¹ or possession of all nongame mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), or various modes of nonlethal pursuit or capture may be considered “take” as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, could be considered potentially significant under the California Environmental Quality Act.

METHODS

LSA Senior Biologist and bat specialist Jill Carpenter performed the focused bat survey on October 3, 2019. The bat specialist was assisted during the survey by LSA Senior Biologist Sara Louwsma and LSA Assistant Biologist Jessica Lieu, both of whom have past experience assisting with nighttime bat surveys. The nighttime emergence component of the survey began 0.5 hour before sunset and continued until 1 hour after sunset, for a total of 1.5 hours. During the emergence period, each observer was stationed at a vantage point that optimized visibility of any bats that could exit or enter each group of trees being observed, and to correlate the acoustic data recorded with visual observations. The number of bats exiting or entering any of the trees was recorded using handheld tally counters and species observed were identified using a combination of visual and acoustic techniques.

Acoustic detectors were deployed concurrently to aid in identifying any bats that were observed emerging from the trees, and to determine whether any tree-roosting bat species are present (and therefore have the potential to roost) within the portion of the project area. Anabat Express (Titley Scientific) ultrasound detectors were used to collect bat echolocation call (acoustic) data, and secure digital (SD) memory cards were used to record the call files. The acoustic detectors were deployed prior to the start of the emergence period at each group of trees, and retrieved at the conclusion of the emergence period. Figure 1 depicts the locations where detectors were set. The data collected during the surveys were subsequently analyzed using AnaloookW acoustic analysis software (for echolocation call sequences recorded on the Anabat Expresses). Species identifications of acoustic data, where possible, were made by comparing call recordings with a library of “voucher” calls from known, hand-released bats.

RESULTS

The project area consists mainly of grassy, park-like areas with clusters of mature trees such as eucalyptus (*Eucalyptus* spp.), palms (*Washingtonia robusta*), pines (*Pinus* sp.), oaks (*Quercus* sp.), and New Zealand Christmas tree (*Metrosideros excelsa*). Western yellow bat (*Lasiurus xanthinus*), which is considered a palm tree roost obligate, is not expected to roost in the palm trees on site because they lack the dead frond “skirts” used by these bats for roosting. All of the other trees within the project area are suitable for use by western red bat (*Lasiurus blossevillii*) and hoary bat (*Lasiurus cinereus*), which are known to roost in the foliage of similar trees. While western red bats

¹ Take is defined in Section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

and hoary bats may roost in the foliage, other species including big brown bat (*Eptesicus fuscus*) and multiple species in the *Myotis* genus may roost in the crevices and cavities of mature trees. Areas of peeling bark and other crevices that could be used by crevice-dwelling bat species were also observed in some of the trees within the project area.

The weather during the nighttime emergence survey conducted at the Belmont Pool Complex on October 3, 2019, was seasonally warm, with wind less than 5 miles per hour. The temperature at the beginning of the emergence period was 71.6 degrees Fahrenheit (°F) and 68°F at the conclusion of the emergence period, 1 hour after sunset. No bats were observed emerging from any of the trees, nor were any bats visually observed anywhere during the emergence period. However, during analysis of the acoustic data collected during the nighttime emergence survey, two echolocation sequences identified as belonging to Mexican free-tailed bat (*Tadarida brasiliensis mexicana*) were recorded 33 minutes after sunset (at 1908 hours) at the two easternmost locations where acoustic detectors were deployed. Because these two calls were detected less than 10 seconds apart on two acoustic detectors placed in the eastern portion of the project area, it is likely that these calls belong to the same individual passing over the site. No other bat species were detected during the survey.

CONCLUSIONS AND RECOMMENDATIONS

The mature ornamental trees within the project area have the potential to be used by a variety of bat species for roosting; however, no bats were observed emerging from any of the trees and bat activity in general was extremely low at this site. Two echolocation call sequences that likely belonged to the same Mexican free-tailed bat individual were recorded in the eastern portion of the site, but this typically high-flying species was not observed and was likely passing over the project area. Low bat activity can be attributed to the fact that, while some limited foraging habitat is present within the project area, the surrounding area is heavily developed and likely does not support a diversity or abundance of insects that would provide prey for bats.

Based upon the results of this focused preconstruction bat survey, which included a nighttime acoustic and emergence survey, there is no evidence that bats are currently roosting in or around the project site. Therefore, removal of the trees and other project-related activities within that area are not anticipated to result in impacts to day-roosting bats or bat colonies.

Attachments: Figure 1: Bat Survey Study Area

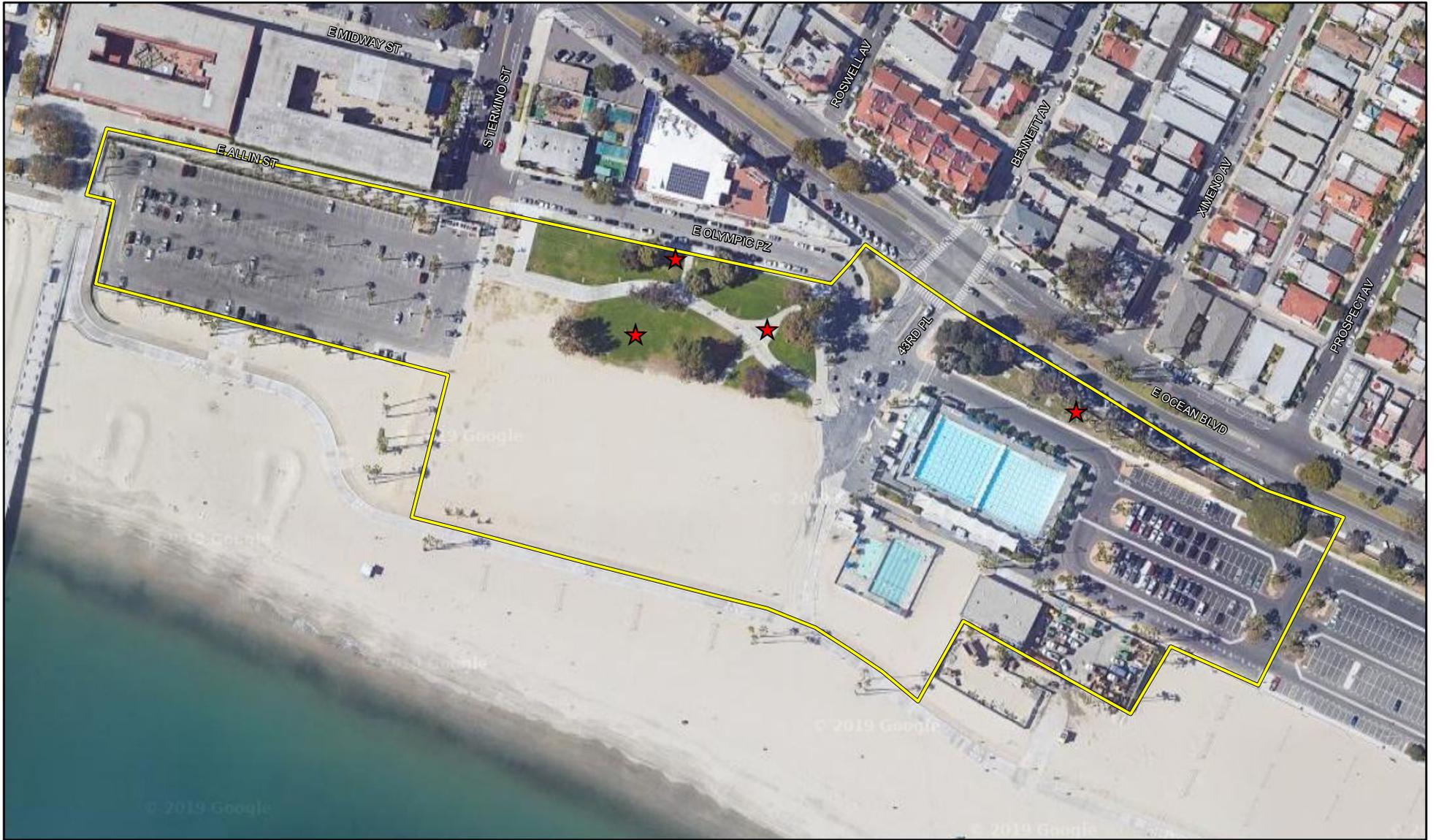


FIGURE 1

LSA

LEGEND

- Survey Area
- ★ Acoustic Detector Locations

