

**APPENDIX B**  
**Cultural Assessment**





# **CULTURAL RESOURCES ASSESSMENT FOR THE 2300 REDONDO AVENUE PROJECT, CITY OF LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA**

**Prepared for:**

Alan Ashimine  
Michael Baker International

**Authors:**

Megan Wilson, MA and Sherri Gust, MS

**Principal Archaeologist:**

Molly Valasik, MA, RPA

**September 2017**

***Cogstone Project Number:*** 4139

***Type of Study:*** Cultural resources due diligence – CEQA and AB52

***USGS Quadrangle:*** Long Beach 7.5'

***Area:*** 19.09 acres

***Key Words:*** Gabrielino, Tongva

## TABLE OF CONTENTS

<b>MANAGEMENT SUMMARY .....</b>	<b>IV</b>
<b>INTRODUCTION .....</b>	<b>1</b>
PURPOSE OF STUDY .....	1
PROJECT LOCATION AND DESCRIPTION .....	3
PROJECT PERSONNEL.....	3
<b>REGULATORY ENVIRONMENT .....</b>	<b>6</b>
CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970, AS AMENDED .....	6
<i>Tribal Cultural Resources</i> .....	6
PUBLIC RESOURCES CODE.....	7
CALIFORNIA REGISTER OF HISTORICAL RESOURCES .....	7
NATIVE AMERICAN HUMAN REMAINS .....	8
CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307.....	8
<b>BACKGROUND.....</b>	<b>9</b>
ENVIRONMENTAL SETTING.....	9
PREHISTORIC SETTING.....	10
ETHNOGRAPHY .....	13
HISTORICAL SETTING .....	15
<i>Spanish and Mexican Era Setting (1542-1847)</i> .....	15
<i>Rancho Los Nieto</i> .....	15
<i>Project Area History</i> .....	17
<b>RECORDS SEARCH.....</b>	<b>20</b>
CALIFORNIA HISTORIC RESOURCES INVENTORY SYSTEM.....	20
OTHER SOURCES .....	22
<b>NATIVE AMERICAN CONSULTATION .....</b>	<b>23</b>
<b>SURVEY.....</b>	<b>24</b>
METHODS.....	24
RESULTS.....	24
<b>TRIBAL CULTURAL RESOURCES .....</b>	<b>26</b>
<b>STUDY FINDINGS AND CONCLUSIONS .....</b>	<b>26</b>
RECOMMENDATIONS.....	26
<b>REFERENCES CITED.....</b>	<b>28</b>
<b>APPENDIX A: QUALIFICATIONS .....</b>	<b>31</b>
<b>APPENDIX B: NATIVE AMERICAN AND HISTORICAL SOCIETY CONSULTATION.....</b>	<b>35</b>

## LIST OF FIGURES

FIGURE 1. PROJECT VICINITY .....	1
FIGURE 2. PROJECT LOCATION MAP .....	2
FIGURE 3. PROJECT AERIAL.....	4
FIGURE 4. PROJECT CONCEPT PLAN .....	5
FIGURE 5. ETHNOGRAPHIC NATIVE AMERICAN TRIBAL TERRITORIES .....	14
FIGURE 6. SPANISH/MEXICAN LAND GRANT.....	16
FIGURE 7. 1935 BLACKBURN’S OF ORANGE COUNTY MAP .....	18
FIGURE 8. 1963 HISTORIC AERIAL.....	19
FIGURE 9. USPS FACILITY PUBLIC ENTRANCE, VIEW NORTHWEST.....	25
FIGURE 10. EAST ELEVATION OF THE USPS FACILITY, VIEW NORTH .....	25

## LIST OF TABLES

TABLE 1. CULTURAL PATTERNS AND PHASES .....	11
TABLE 2. PREVIOUS STUDIES WITHIN A ONE-MILE RADIUS OF THE PROJECT AREA .....	20
TABLE 3. PREVIOUSLY RECORDED RESOURCES WITHIN A ONE-MILE RADIUS OF THE PROJECT AREA.....	21
TABLE 4. ADDITIONAL SOURCES CONSULTED.....	22

## MANAGEMENT SUMMARY

**Purpose and Scope:** The purpose of this study is to determine whether the 2300 Redondo Avenue Project, located in the City of Long Beach, Los Angeles County, California, has the potential to impact cultural resources. The study included a cultural resources records search and literature review, a cultural resources survey, and the preparation of a cultural resources technical report.

This study is compliant with California Public Resources Code (PRC) Section 5024.1, Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) (California PRC Section 21000 et. seq.), and Section 15064.5 of the CEQA Guidelines (California Code of Regulations Section 15000 et. seq.). PRC Section 5024.1 requires the identification and evaluation of cultural resources which may be affected by a proposed Project.

**Dates of Investigation:** On July 17, 2017, Cogstone completed a California Historic Resources Inventory System (CHRIS) records search at the South Central Coast Information Center (SCCIC). The records search covered the entire Project Area plus a one-mile radius. Cogstone performed the intensive pedestrian survey of the entire Project Area on August 2, 2017.

**Summary of Findings:** The results of the records search indicate that there are no previously recorded cultural resources present in the Project Area, while three previously recorded cultural resources are located within a one mile radius of the Project Area. At the time of the field survey, the ground visibility within the Project Area was generally very poor (0-5 %), as it is currently covered by a large, non-historic United States Postal Service mail processing center, vehicle maintenance facility, and is surrounded by parking lots with small strips of landscaping around the perimeter. No prehistoric cultural resources were observed.

No significant cultural resources are known to exist within the Project Area or the immediate vicinity. No further cultural resources work is necessary. In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a professional archaeologist can evaluate it. If human remains are unearthed during excavation, State Health and Safety Code Section 7050.5 states “there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered... [has made the appropriate assessment, and] ...recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.”

# INTRODUCTION

## PURPOSE OF STUDY

The purpose of this study is to determine whether the 2300 Redondo Avenue (Project), located in the City of Long Beach, Los Angeles County, California (Figures 1 and 2), has the potential to impact cultural resources. The study included a cultural resources records search and literature review, a cultural resources survey, and the preparation of a cultural resources technical report.

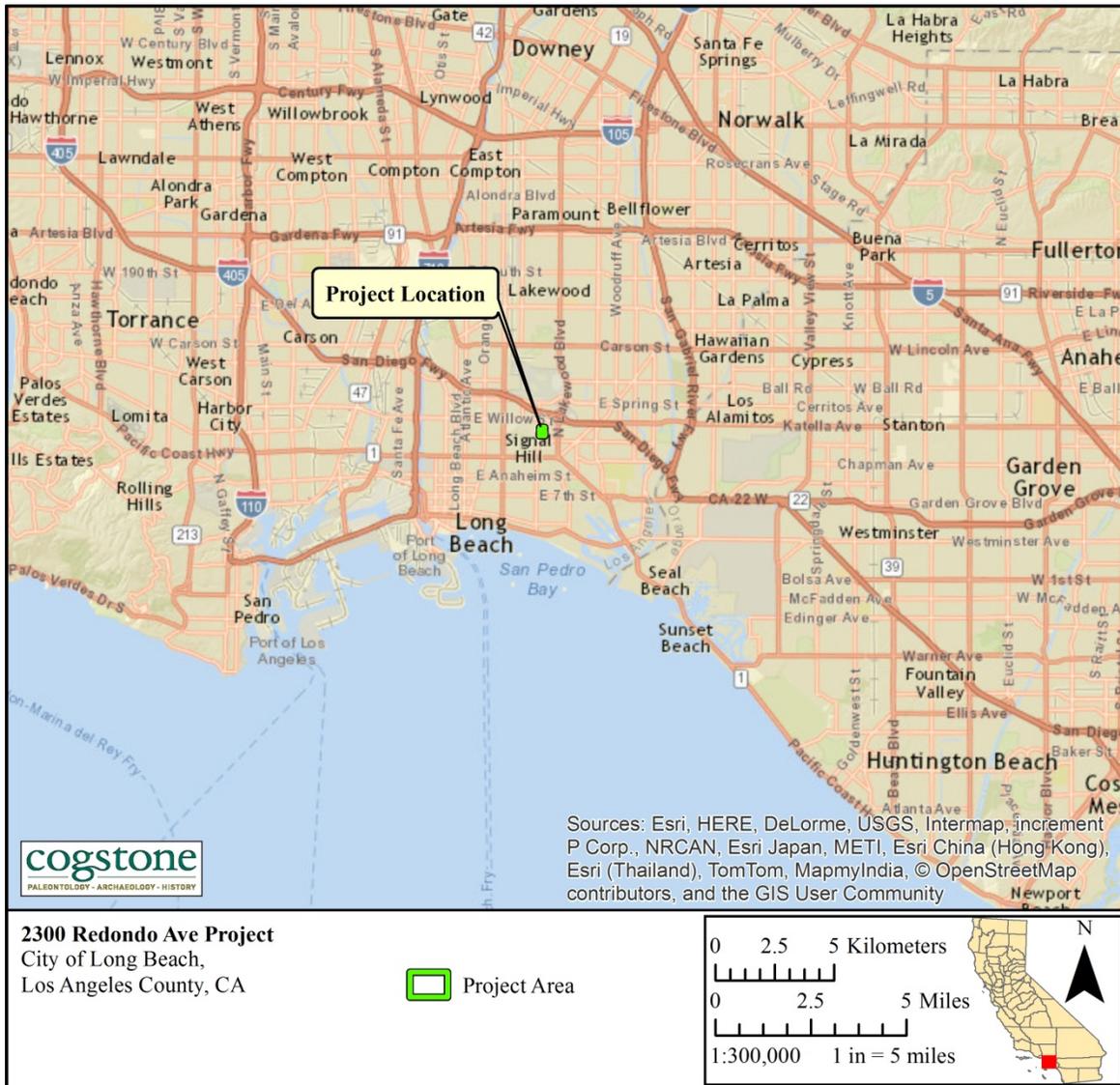


Figure 1. Project Vicinity

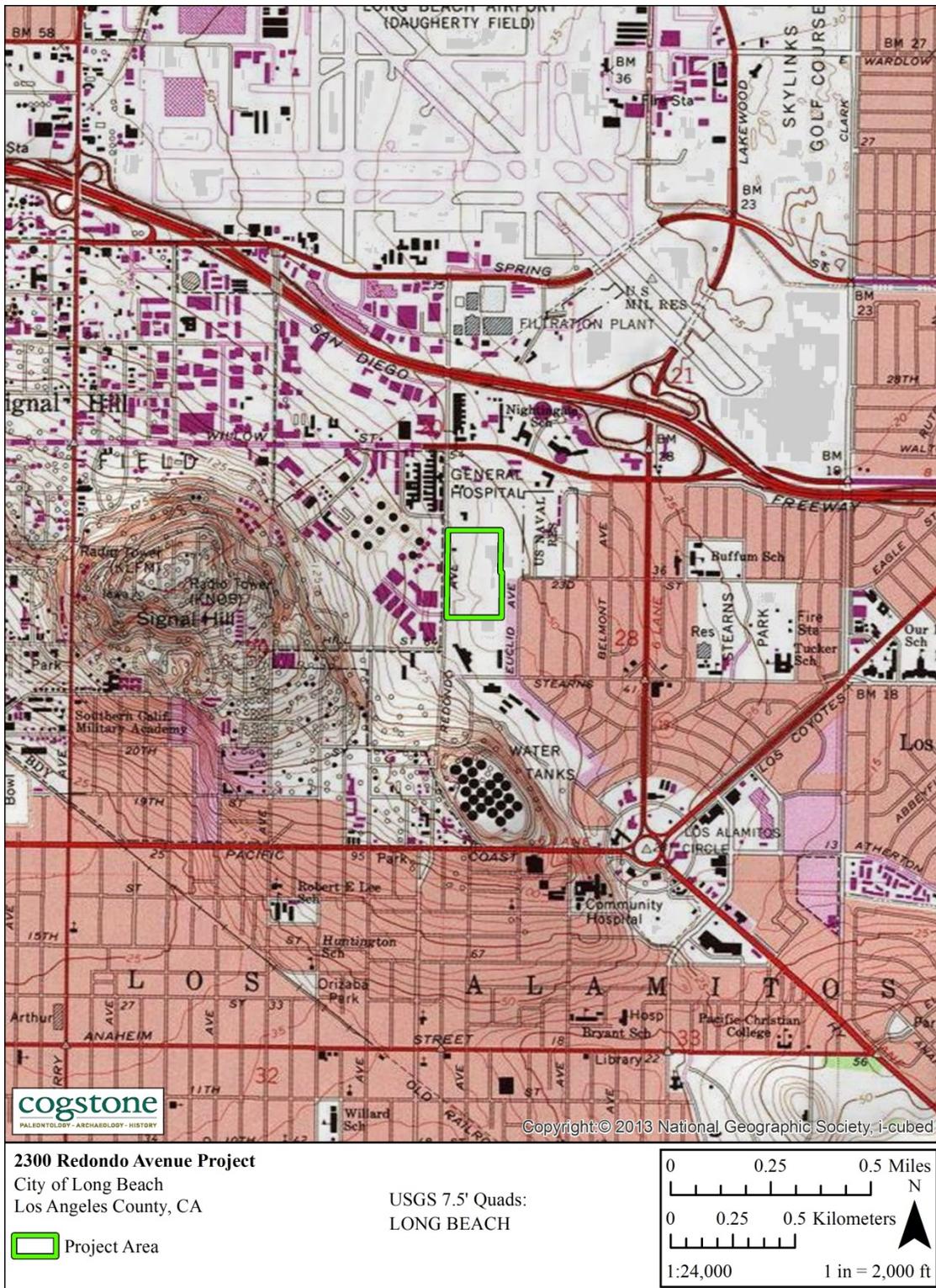


Figure 2. Project Location Map

## **PROJECT LOCATION AND DESCRIPTION**

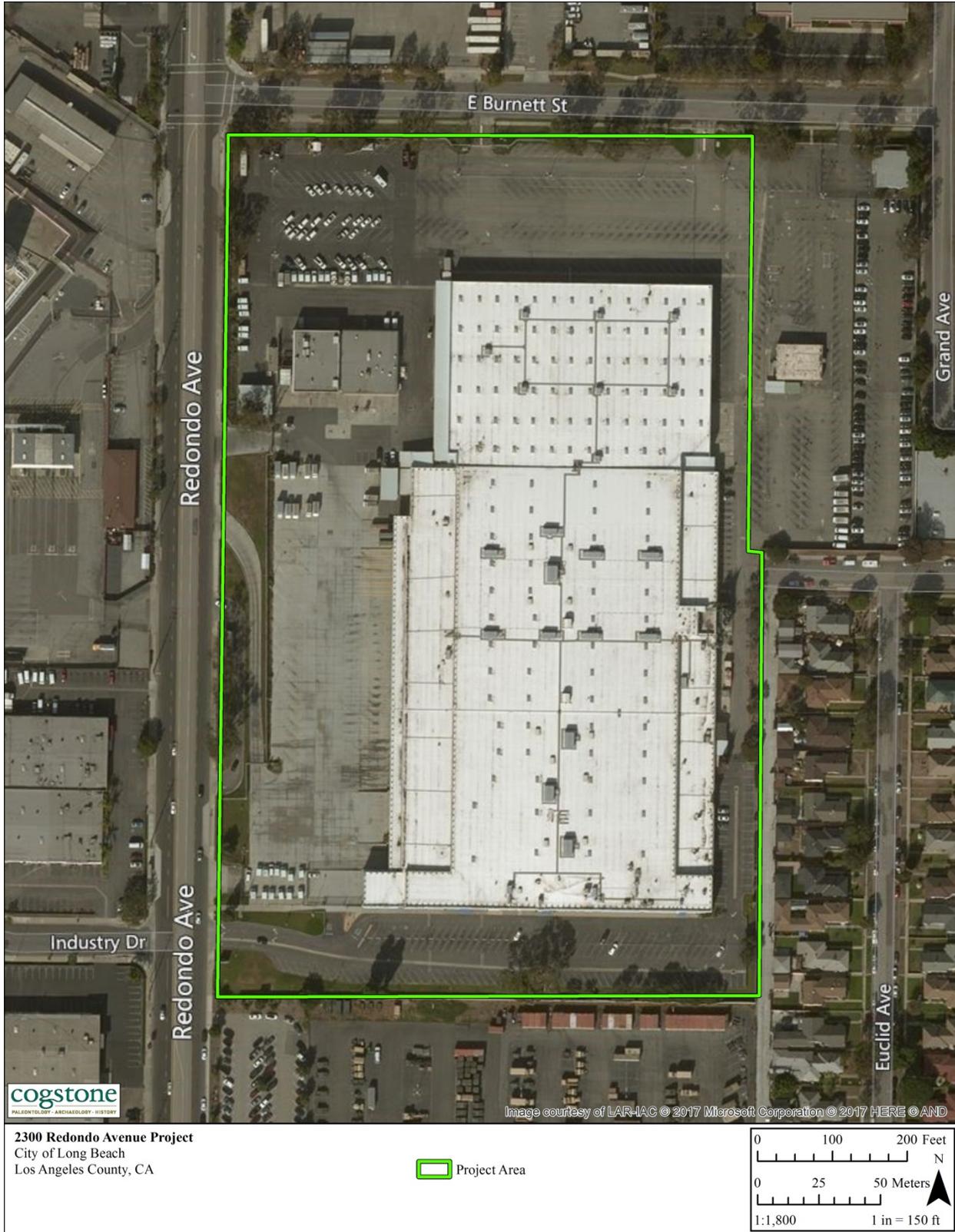
The proposed 2300 Redondo Avenue Project (Project) is located entirely within the City of Long Beach, bordered by Redondo Avenue to the West, a California National Guard Facility to the South, a residential neighborhood to the East, and Burnett Street to the North. The Project is located on the U.S. Geological Survey (USGS) Long Beach 7.5-minute topographic quadrangle map within Section 28 of Township 4 South, Range 12 West (see Figure 2).

The Project involves the construction of three buildings encompassing 427,548 square feet of warehouse/distribution/logistics uses with supporting office facilities and 638 parking spaces on a 19.09-acre site within the City of Long Beach (Figure 3 and Figure 4). The majority of the excavations are planned to be 5 feet below the surface. The maximum depth of excavation is eight feet in localized areas for building footings.

The Project Area is currently occupied by the GMF Long Beach Station Post Office which was constructed in 1979 and expanded in the early 2000s. The Post Office is a mail processing/vehicle maintenance facility and retail office.

## **PROJECT PERSONNEL**

Cogstone Resource Management Inc. (Cogstone) conducted the cultural resources study. Molly Valasik served as the Principal Investigator for the Project, supervising all work. Ms. Valasik is RPA certified and holds a B.A. in Anthropology from Ohio State University as well as an M.A. in Anthropology from Kent State University in Ohio. Ms. Valasik has eight years of experience in California archaeology. Megan Wilson performed the record search, pedestrian survey, prepared Project maps, and prepared sections of this report. Ms. Wilson has an M.A. in Anthropology from California State University at Fullerton and is RPA certified with over five years of experience in southern California archaeology. Sherri Gust wrote the prehistory portion of this report. Gust is RPA certified and has an M.S. in Anatomy (Evolutionary Morphology) from the University of Southern California, a B.S. in Anthropology from the University of California at Davis and over 30 years of experience in California. Qualifications of key Project personnel are provided (Appendix A).



**Figure 3. Project Aerial**

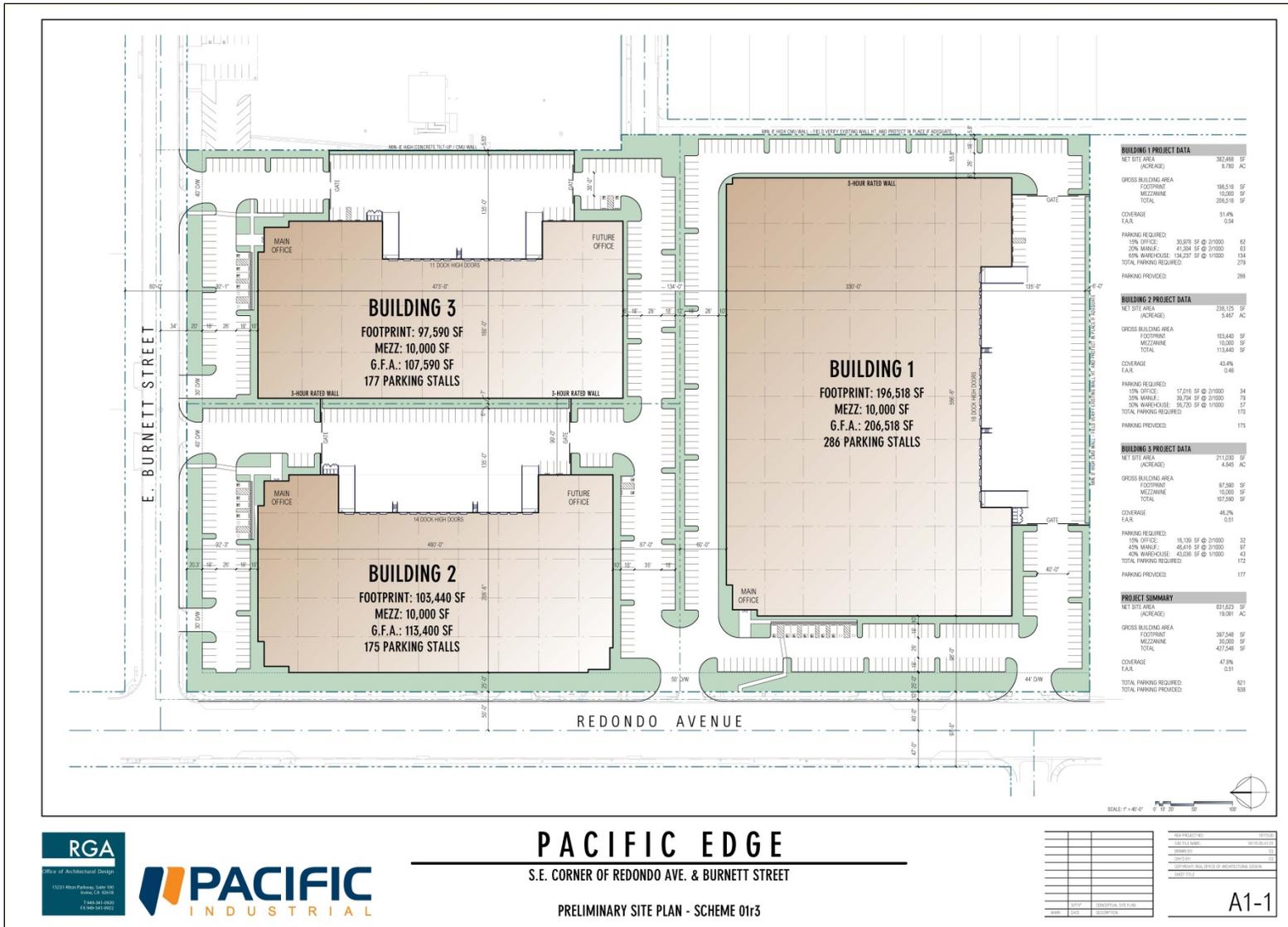


Figure 4. Project Concept Plan

## **REGULATORY ENVIRONMENT**

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970, AS AMENDED**

CEQA states that: “It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects”.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

### **TRIBAL CULTURAL RESOURCES**

As of 2015, CEQA established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Pub. Resources Code, § 21084.2). In order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

## **PUBLIC RESOURCES CODE**

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

## **CALIFORNIA REGISTER OF HISTORICAL RESOURCES**

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups and citizens to identify, evaluate, register and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archeological resources.

The California Register program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under the California Environmental Quality Act.

To be eligible for listing in the California Register, a resource must meet at least one of the following four criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States
2. Associated with the lives of persons important to local, California or national history
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the Nation

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or

changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

## **NATIVE AMERICAN HUMAN REMAINS**

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

## **CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307**

This section states that “No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value.”

## BACKGROUND

### ENVIRONMENTAL SETTING

Los Angeles County is located on the coastal side of the Peninsular Range Province and is known for its semi-arid Mediterranean climate with hot summers and cool winters. The Project is located in the center of the City of Long Beach and directly east of the City of Signal Hill along Redondo Avenue. The Project Area is located within the Los Angeles Plain within the Long Beach Oil Field, also within the Newport-Inglewood Fault zone; a right lateral local reverse slip associated with fault steps (SCEDC 2 n.d.).

Native vegetation consists primarily of chaparral with riparian species present along the Los Angeles River and its tributary streams. Among the purple sage (*Salvia leucophylla*), Eastwood's manzanita (*Arctostaphylos glandulosa glandulosa*), Catalina ironwood (*Lyonothamnus floribundus*), California scrub oak (*Quercus dumosa*), big-leaf maple (*Acer macrophyllum*), and coast cholla (*Opuntia prolifera*) (Caughman and Ginsberg 1987:278; Wilson 2016). Other riparian woodland species include California laurel (*Umbellularia californica*), Western Sycamore (*Platanus racemosa*), and Black Willow (*Salix gooddingii*), Pacific Willow (*Salix lasiandra*), Fremont Cottonwood (*Populus fremontii*), as well as a variety of shrubs and grasses (Schoenherr 1992:393–395). Today, after approximately a century of urban and suburban development and the channelization, the vegetation of the area is instead typified by imported species of grasses such as slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), and Giant reed (*Arundo donax*); shrubs, such as saltcedar (*Tamarix ramosissima*) and blackwood acacia (*Acacia melanoxylon*); as well as trees including eucalyptus (*Eucalyptus globulus*), Brazilian pepper (*Schinus terebinthifolius*), and saltcedar (*Tamarix* spp.) (Cal-IPC 2006).

Native fauna of the region include mammals such as mule deer (*Odocoileus hemionus*), bighorn sheep (*Ovis canadensis cremnobates*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), antelope, white-tailed jackrabbit (*Lepus townsendii*), mountain lion (*Felis concolor*), desert woodrat, (*Neotoma lepida*), and formerly, grizzly bear (*Ursus arctos*). Amphibian and reptile species include Monterey salamander (*Ensatina eschscholtzii eschscholtzii*), sagebrush lizard (*Sceloporus graciosus*), and common kingsnake (*Lampropeltis getulus*). Among native bird species are California thrasher, (*Toxostoma redivivum*), California towhee (*Pipilo crissalis*), and great horned owl (*Bubo virginianus*) (Schoenherr 1992). The Los Angeles River was once host to arroyo chub (*Gila orcuttii*), Santa Ana sucker (*Catostomus santaanae*), and speckled dace (*Rhinichthys osculus*), which now survive only in the river's tributaries (Palmer 2012:242). In recent history, urban development has driven many of these species from the area.

## PREHISTORIC SETTING

Review of archaeological data has resulted in a revised synthesis of cultural change as evidenced by material culture and archaeologically visible cultural practices. A large part of what was previously referred to as the Millingstone Period is now called the Topanga pattern of the Encinitas Tradition (Sutton and Gardner 2010; Table 1). This pattern is replaced in the Project Area by the Angeles pattern of the Del Rey Tradition later in time (Sutton 2010; Table 1).

Topanga Pattern groups were relatively small and highly mobile. Sites tend to be along the coast in wetlands, bays, coastal plains, near-coastal valleys, marine terraces and mountains. The Topanga toolkit is dominated by manos and metates with projectile points scarce (Sutton and Gardner 2010:9).

In Topanga Phase I, other typical characteristics include a few mortars and pestles, abundant core tools (scraper planes, choppers and hammerstones), relatively few large, leaf-shaped projectile points, cogged stones, and early discoidals (Table 1). Secondary inhumations under cairns was the common mortuary practice. In Orange County as many as 600 flexed burials were present at one site and dated 6435 radiocarbon years before present (Sutton and Gardner 2010:9, 13).

In Topanga Phase II, flexed burials and secondary burial under cairns continued. Adoption of the mortar and pestle is a marker of this phase. Other typical artifacts include manos, metates, scrapers, core tools, discoidals, charmstones, cogged stones and an increase in the number of projectile points. In Orange County, stabilization of sea level during this time period resulted in increased use of estuary, near shore, and local terrestrial food sources (Sutton and Gardner 2010:14-16).

In Topanga Phase III, there was continuing abundance of metates, manos, and core tools plus increasing amounts of mortars and pestles. More numerous and varied types of projectile points are observed along with the introduction of stone-lined earthen ovens. Cooking features such as these were possibly used to bake yucca or agave. Both flexed and extended burials were known (Sutton and Gardner 2010:17).

TABLE 1. CULTURAL PATTERNS AND PHASES

Pattern	Phase	Dates (BP)	Material Traits	Other Traits
Encinitas	Topanga I	8,500 to 5,000	Abundant manos and metates, many core tools and scrapers, few but large points, charmstones, cogged stones, early discoidals, bone gorge fishhooks, faunal remains rare; Olivella spire/end lopped beads appear	Estuary/lagoon shellfish and sharks/rays common, hunting important, secondary burials under metate cairns (some with long bones only), some extended inhumations, no cremations
	Topanga II	5,000 to 3,500	Abundant but decreasing manos and metates, adoption of mortars and pestles, smaller points, cogged stones, late discoidals, fewer scraper planes and core tools, some stone balls and charmstones; inhumations common; Olivella Grooved Rectangular beads introduced	Estuary/lagoon shellfish and sharks/rays common,, addition of acorns, reburial of long bones only, addition of flexed inhumations (some beneath metate cairns), cremations rare
Angeles	Angeles I	3,500 to 2,600	Appearance of Elko dart points and an increase in the overall number of projectile points from Encinitas components; beginning of large-scale trade in small steatite artifacts (effigies, pipes, and beads) and <i>Olivella</i> shell beads; appearance of single-piece shell fishhooks and bone harpoon points; Coso obsidian becomes important; appearance of donut stones; appearance of <i>Mytilus</i> beads	Apparent population increase; fewer and larger sites along the coast; collector strategy; less overall dependence on shellfish but fishing and terrestrial hunting more important; appearance of flexed and extended inhumations without cairns, cremations uncommon
	Angeles II	2,600 to 1,600	Continuation of basic Angeles I material culture with the addition of mortuary features containing broken tools and fragmented cremated human bone; fishhooks become more common	Shellfish change to mudflat species, more emphasis on fish, birds and mammals, continuation of basic Angeles I settlement and subsistence systems; appearance of a new funerary complex
	Angeles III	1,600 to 1,250	Appearance of bow and arrow technology (e.g., Marymount or Rose Spring points); changes in <i>Olivella</i> beads; asphaltum becomes important; reduction in obsidian use; Obsidian Butte obsidian largely replaces Coso	Larger seasonal villages; flexed primary inhumations but no extended inhumations and an increase in cremations; appearance of obsidian grave goods
	Angeles IV	1,250 to 800	Cottonwood points appear; some imported pottery appears; birdstone effigies at the beginning of the phase and “spike” effigies dropped by the end of the phase; possible appearance of ceramic pipes, <i>Mytilus</i> shell disks	Change in settlement pattern to fewer but larger permanent villages; flexed primary inhumations continue, cremations uncommon
	Angeles V	800 to 450	Trade of steatite artifacts from the southern Channel Islands becomes more intensive and extensive, with the addition or increase in more and larger artifacts, such as vessels and comals; larger and more elaborate effigies; portable mortars and pestles	Strengthening of ties, especially trade, with southern Channel Islands; expansion into the northern Santa Ana Mountains and San Joaquin Hills
	Angeles VI	450 to 150	Addition of Euroamerican material culture (e.g., glass beads and metal tools), locally made pottery, metal needle-drilled <i>Olivella</i> beads	Change of settlement pattern, movement close to missions and ranches; use of domesticated species obtained from Euroamericans; flexed primary inhumations continue; apparent adoption of Chingichngish religion

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing. In Angeles Phase I Elko projectile points for atlatls or darts appear, small steatite objects such as pipes and effigies are found, shell beads and ornaments increase, fishing technologies increase including bone harpoons/fishhooks and shell fishhooks, donut stones appear, and hafted micro blades for cutting/graving wood or stone appear. In addition, several Encinitas traits, such as discoidals, cogged stones, plummet-like charm stones and cairn burials virtually disappear from the record. Mortuary practices changed to consist of primarily flexed primary inhumations, with extended inhumations becoming less common. Settlement patterns made a shift from general use sites being common to habitation areas separate from functional work areas. Subsistence shifted from mostly collecting to increased hunting and fishing (Sutton 2010).

The Angeles Phase II is identified primarily by the appearance of a new funerary complex, with other characteristics similar to Angeles I. The complex features killed (broken) artifacts plus highly fragmented cremated human bones and a variety of faunal remains. In addition to the cremains, the other material also often burned. None of the burning was performed in the burial feature (Sutton 2010).

The Angeles III Phase is the beginning of what has been known as the Late Period and is marked by several changes from Angeles I and II. These include the appearance of small projectile points, steatite shaft straighteners and increased use of asphaltum all reflecting adoption of bow and arrow technology, obsidian sources changed from mostly Coso to Obsidian Butte and shell beads from Gulf of California species began to appear. Subsistence practices continued as before and the geographic extent of the Angeles Pattern increased (Sutton 2010).

Angeles Phase IV is marked by new material items including Cottonwood points for arrows, *Olivella* cupped beads and *Mytilus* shell disks, birdstones (zoomorphic effigies with magico-religious properties) and trade items from the Southwest including pottery. It appears that populations increased and that there was a change in the settlement pattern to fewer but larger permanent villages. Presence and utility of steatite vessels may have impeded the diffusion of pottery into the Los Angeles Basin. The settlement pattern altered to one of fewer and larger permanent villages. Smaller special-purpose sites continued to be used (Sutton 2010).

Angeles V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies and comals. Settlement locations shifted from woodland to open grasslands. The exploitation of marine resources seems to have declined and use of small seeds increased. Inhumations contained grave goods while cremations did not (Sutton 2010).

The Angeles VI phase reflects the post-contact (i.e., post-A.D. 1542) period. One of the first changes after contact was undoubtedly population loss due to disease, coupled with resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euroamerican tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euroamerican material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle-drilled *Olivella* disk beads. [Sutton 2010]

The subsistence system was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited (Sutton 2010).

## **ETHNOGRAPHY**

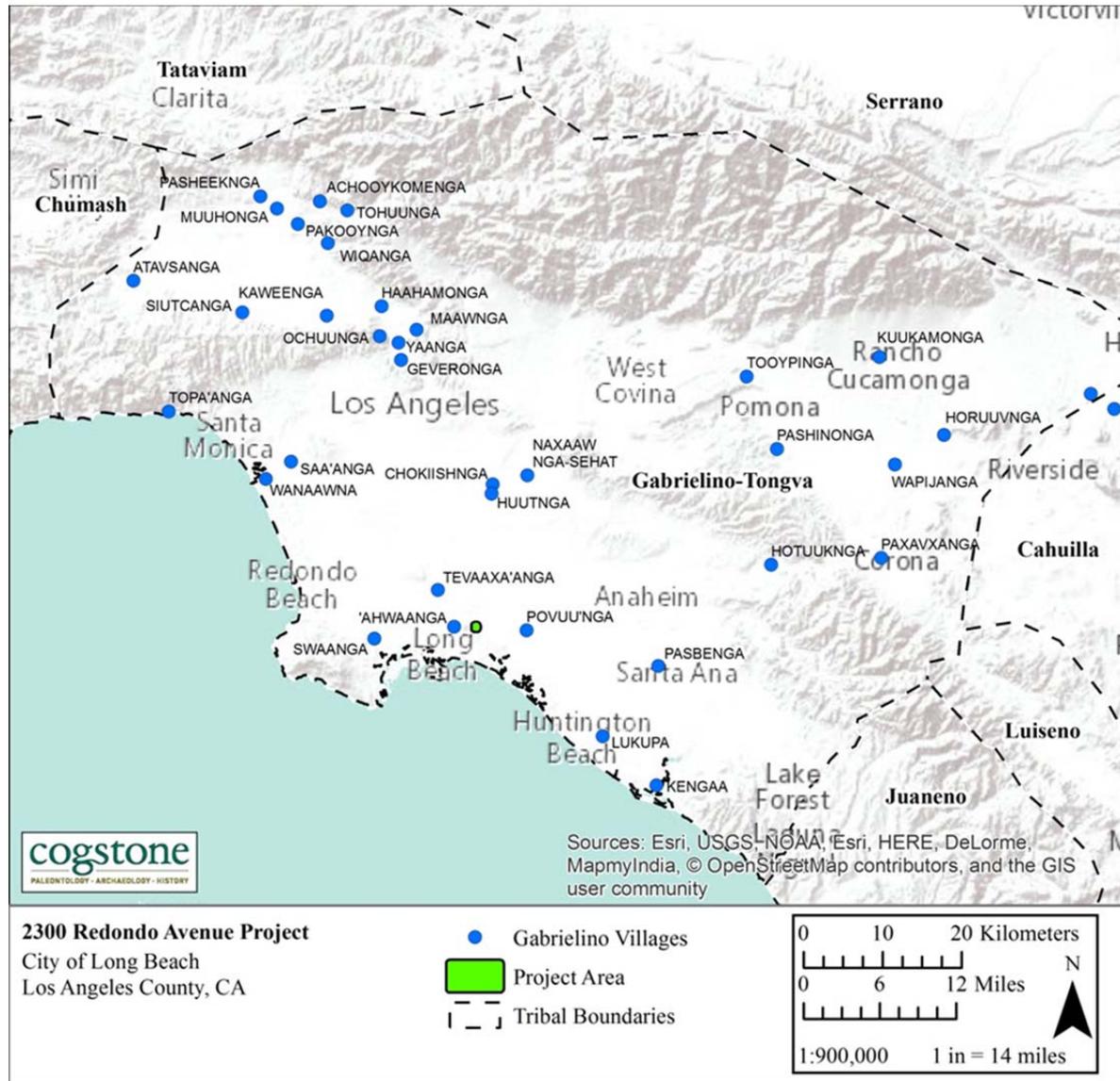
The Project Area was within the territory of the Tongva (Gabrielino) (McCawley 1996). The Tongva geographical territory includes large portions of Los Angeles County, the northern part of Orange County, small sections of Riverside and San Bernardino Counties as well as the southern Channel Islands of Santa Barbara, San Clemente, San Nicolas, and Santa Catalina (Figure 5). The name “Gabrielino” is Spanish in origin and was used in reference to the Native Americans associated with the Mission San Gabriel. Today community members call themselves “Tongva”, meaning “people of the earth” (Gabrielino/Tongva Tribal Council of San Gabriel 2015). At the time of European contact, there were an estimated 5,000 Tongva living at 31 known villages (McCawley 1996).

The Tongva language is classified as part of the Uto-Aztecan language family, under the Takic branch. It is now generally accepted that the Gabrielino language is a stand-alone Takic language, distinct from the Cupan sub-group (Mithun 1999:539).

Much of the southern California archaeological literature argues that the Gabrielino moved into southern California from the Great Basin around 4,000 Before Present (B. P.), “wedging” themselves between the Hokan-speaking Chumash, located to the north, and the Yuman-speaking Kumeyaay, located to the south (see Sutton 2009 for the latest discussion). This Shoshonean Wedge, or Shoshonean “intrusion” theory, is counter to the Gabrielino community’s knowledge about their history and origins. Oral tradition states that the Gabrielino have always lived in their traditional territory, with their emergence into this world occurring at Puvungna, located in Long Beach located on the Alamitos Plain (Martinez and Teeter 2015:26).

The Tongva are considered to have been one of the wealthiest of all Shoshonean tribes and to have greatly influenced tribes they traded with (Kroeber 1976:621). Houses were domed and

circular structures thatched with tule or similar materials (Bean and Smith 1978:542). The best known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship (Bean and Smith 1978:542).



**Figure 5. Ethnographic Native American tribal territories**

The main food zones utilized were marine, woodland, and grassland (Bean and Smith 1978). Plant foods were, by far, the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. Grass seeds were the next most abundant plant food

used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems and roots for medicinal cures as well as beverages (Bean and Smith 1978:538-540).

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turban, mussels, clams, scallops, bubble shells, and others (Bean and Smith 1978:538-540). The nearest recorded Tongva village is located approximately 1.6 miles west of the Project Area. This village name was *'Ahwaanga* and was one of three important villages located within the City of Long Beach; the others were *Tevaaxa'anga* located 4 miles northwest of the Project Area and *Puvuu'nga* located 4 miles to the east (McCawley 1996:59).

## **HISTORICAL SETTING**

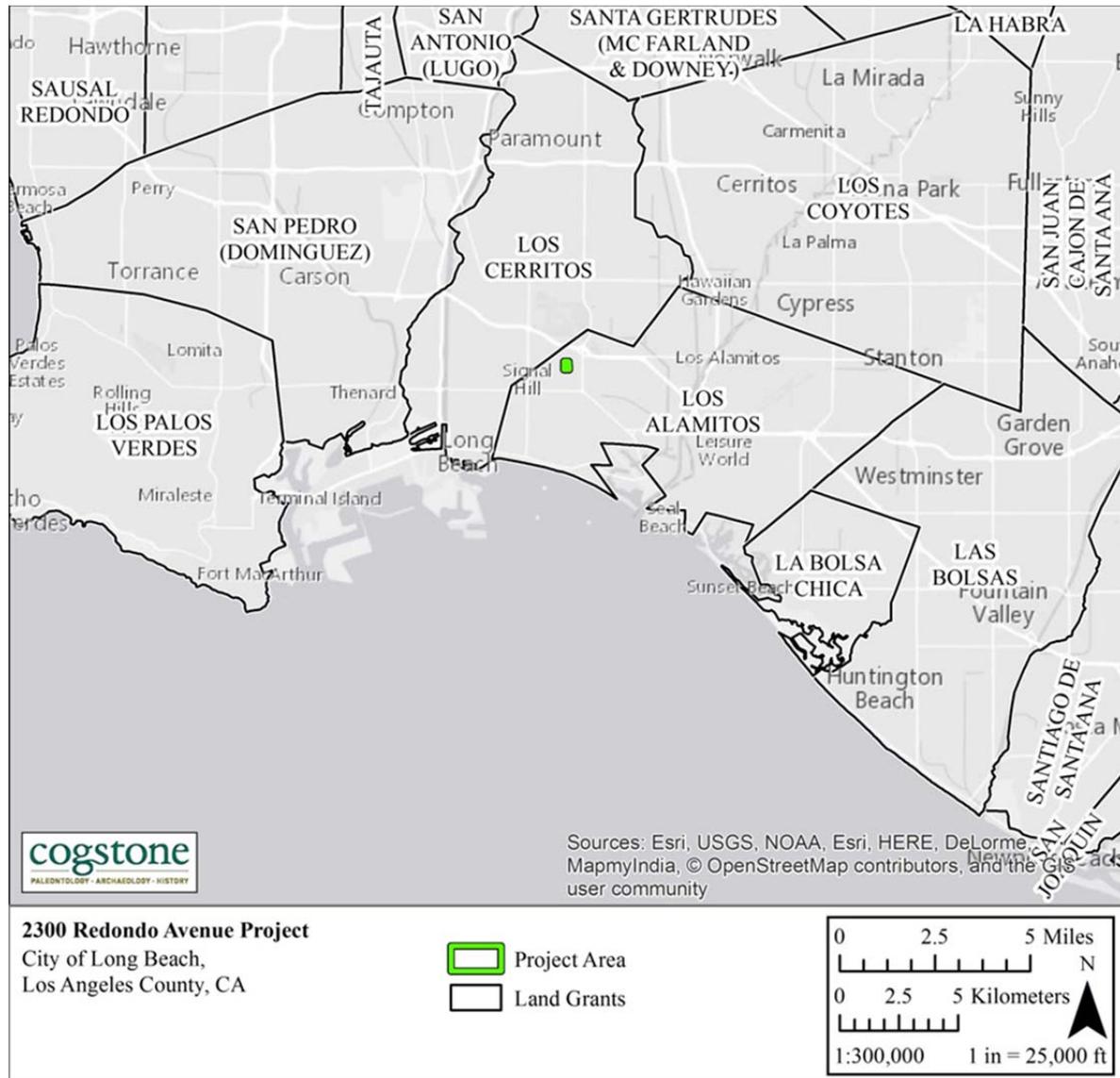
### **SPANISH AND MEXICAN ERA SETTING (1542-1847)**

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino (Rawls and Bean 1993). Between 1769 and 1822 the Spanish had colonized California and established missions, presidios, and pueblos (Bean and Rawls 1993). In 1821, Mexico won its independence from Spain and worked to reduce the wealth, power, influence held by the missions since the earliest colonial settlement. The Secularization Act was passed in 1833 and the new government began awarding vast tracts of mission lands to private citizens (Robinson 1948:13).

### **RANCHO LOS NIETO**

While widespread privatization began in earnest after 1833, certain large tracts of California land were granted to private citizens during the earlier Spanish Era, particularly to well-respected military men who had distinguished themselves in service to the Spanish throne. Nearly all of the lands now comprising the City of Long Beach were part of Rancho Los Nieto, a massive 300,000-acre allotment granted by Spanish governor Pedro Fages to soldier-rancheros, Manuel Pérez Nieto and José María Verdugo in 1784. A portion of the rancho was confiscated by the San Gabriel Mission in 1796 for use as tribal land, though Nieto retained a 167,000-acre portion which his family was cultivating, ranching, or otherwise actively utilizing by that time (Bancroft

1886:662). The much reduced plot nevertheless stretched all the way from the hills north of Whittier, Fullerton, and Brea, south to the Pacific ocean, and from today's Los Angeles River east to the Santa Ana River (Robinson 1966). Nieto died in 1804 and by 1834 the land was subdivided into five separate ranchos, the Santa Gertrudis, Las Bolsas, Los Coyotes, Los Cerritos, and Los Alamitos (Robinson 1948:50; Robinson 1966:29). The greater part of the modern City of Long Beach falls within bounds of the latter two (Garroogian 2013:194), and the Project Area is located within the former Rancho Los Alamitos (Figure 6).



**Figure 6. Spanish/Mexican Land Grant**

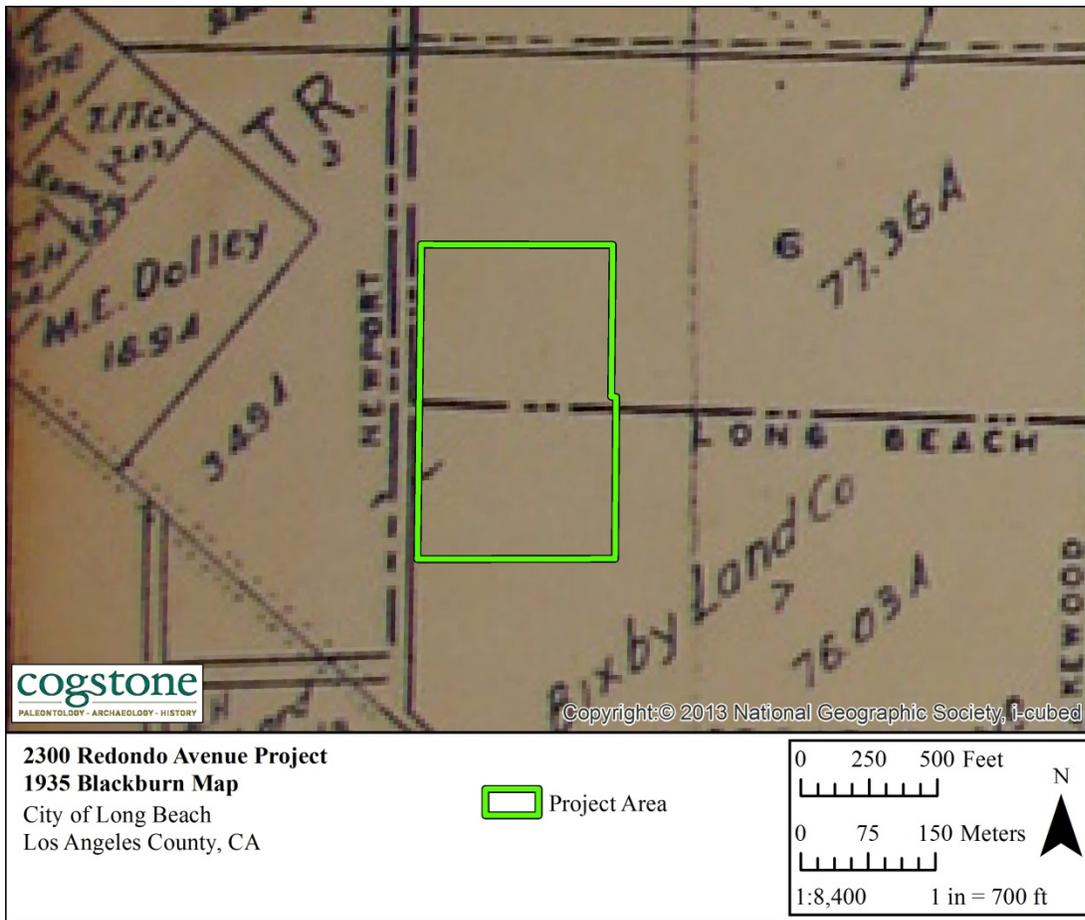
Rancho Los Cerritos which contained the Los Nietos Ranch was parceled off and gifted to Nietos' daughter, Manuela Cota, in 1834. Fewer than 10 years later an American named John Temple purchased Los Cerritos in full, building up a prosperous cattle ranch and constructing an adobe house, the Los Cerritos Ranch House, which still stands today (Robinson 1966:28). Rancho Los Alamitos was inherited by Nieto's son, Juan José Nieto, and in 1834 was sold to Mexican Governor José Figueroa at an unusually low price. By 1842, the property and its livestock were in the possession of Abel Stearns, an American born in Massachusetts. The severe draught which struck the Los Angeles area in the 1860s destroyed the viability of both Temple's and Stearns' ranching ventures, leading to the resale of Los Cerritos and Los Alamitos (Robinson 1966:28). In 1866, Llewellyn Bixby bought Rancho Los Cerritos for about 80 cents per acre, and relatives of Bixby purchased Rancho Los Alamitos for \$120,000 and the two ranchos were combined and converted into sheep ranches (Davis 2006).

### **PROJECT AREA HISTORY**

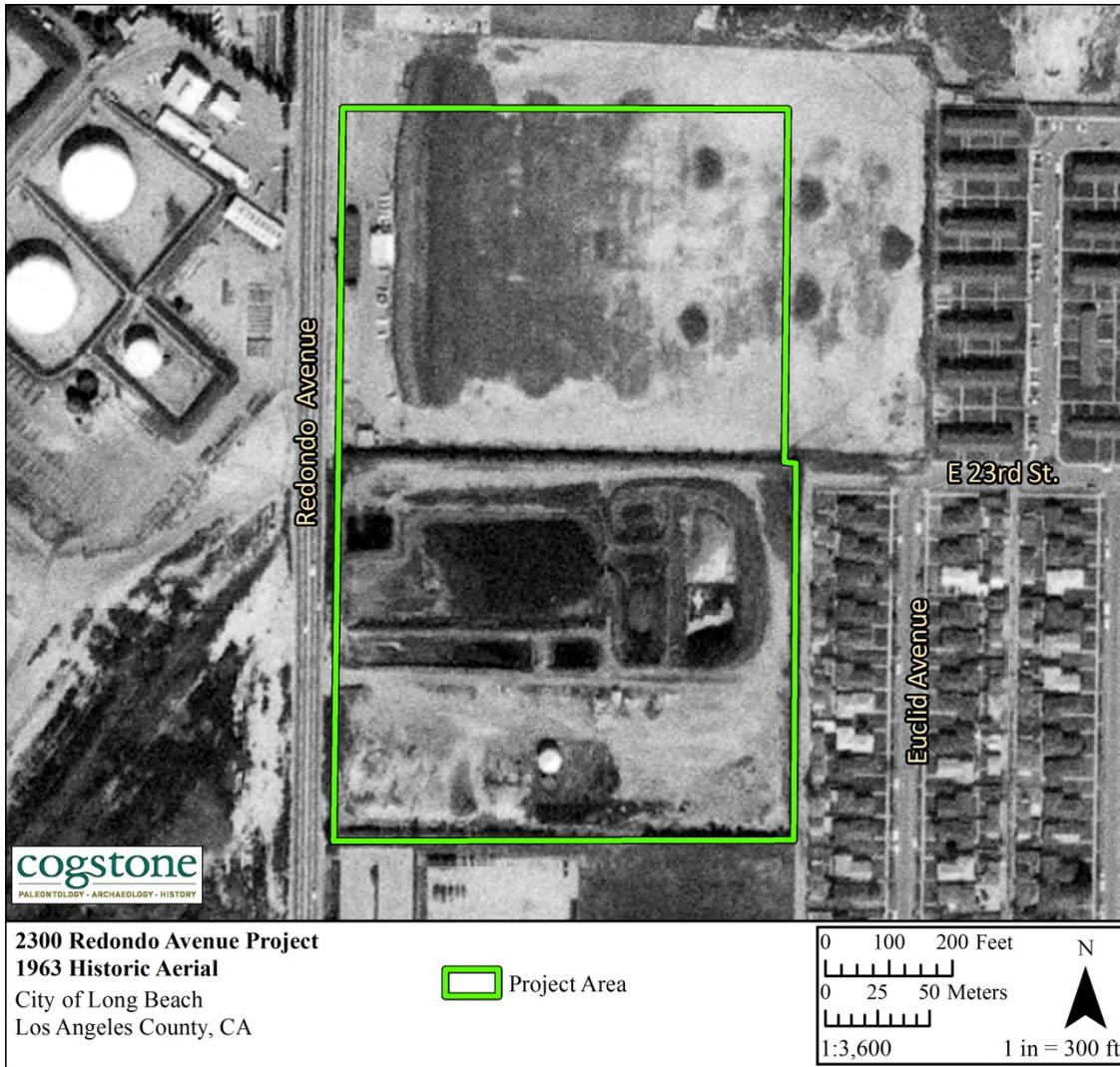
In 1921, the Royal Dutch Shell Oil Company struck oil at Alamitos Well #1 (P-19-0179272), located 0.5 miles southwest of the Project Area in the current City of Signal Hill, marking a dramatic turning point in the history of the cities of Long Beach and Signal Hill. The Project Area is located on the Wilmington Oil Field, the third largest oil field in the contiguous United States with an estimated recovery of three billion barrels of oil (Long Beach Gas and Oil n.d.). Following the discovery of oil at Los Alamitos Well # 1, both cities flourished with million-dollar-per-month building booms (City of Long Beach n.d.).

Blackburn's 1935 Map of Orange County indicates that the entire Project Area was owned by the Bixby Land Company while only the southern portion of the Project Area was located in the City of Long Beach at that time (Figure 7). At that time Redondo Avenue was named Newport Avenue. The 1942 USGS Long Beach 7.5' topographic map shows unimproved road that loops through the center of the Project Area, originating from Newport Avenue (Redondo Avenue) within Long Beach City limits. The 1952 and 1963 historic aerials show the southern portion of the Project Area developed in what appears to be for industrial (oil) or municipal (water treatment) use. The 1963 aerial shows two small structures located on the northwestern boundary of the Project Area as well as circular storage structure on the center of the southern boundary (Figure 8).

Oil production declined in the 1970s and 1980s and the cities of Long Beach and Signal Hill looked to redevelop parcels of land left by the oil companies while the oil companies themselves redirected their focus to real estate development (Dixon 2006). In 1979 the GMF Long Beach Station Post Office was constructed (County of Los Angeles n.d.) and expanded in the early 2000s and is currently used as a mail processing/vehicle maintenance facility and retail office.



**Figure 7. 1935 Blackburn's of Orange County Map**



**Figure 8. 1963 Historic Aerial**

## RECORDS SEARCH

### CALIFORNIA HISTORIC RESOURCES INVENTORY SYSTEM

The purpose of the records search is to identify all previously recorded cultural resources (prehistoric and historic archaeological sites, historic buildings, structures, objects, or districts) within the Project Area. All cultural resources as well as cultural resource surveys performed within a one-mile radius of the Project Area were reviewed.

Megan Wilson, a Cogstone staff archaeologist performed a search for archaeological and historical records on July 17, 2017 at the South Central Coastal Information Center of the California Historical Resources Inventory System located on the campus of the California State University, Fullerton. The record search covered a one-mile radius around the Project Area boundary located on the Long Beach 7.5' topographic quad map. The results of the records search indicated that no prior cultural resources studies have been conducted within the boundaries of the Project Area, while 17 cultural resources investigations have been completed previously within a one-mile radius of the Project Area (Table 2). The previous studies within the one-mile radius included three completed between a 0-0.25-mile radius of the Project Area, seven completed between a 0.25-0.5-mile radius, and seven completed between a 0.5-0.1 mile radius of the Project Area.

**TABLE 2. PREVIOUS STUDIES WITHIN A ONE-MILE RADIUS OF THE PROJECT AREA**

Report No.	Author(s)	Title	Year Recorded	Distance from PA (miles)
LA-01425	Padon, Beth	Belmont Vista Development: Archaeological Records Search	1984	0.25-0.5
LA-01481	Padon, Beth	Signal Hill City Hall: Archaeological Record Search	1985	0.5-1
LA-03651	Cottrell, Marie G.	Record Search for Area No. 1 in the City of Signal Hill	1976	0.5-1
LA-04356	Van Horn, David M.	Archaeological Survey Report: Proposed Termino Avenue Improvement in the City of Long Beach, California	1982	0.25-0.5
LA-04478	Wlodarski, Robert J.	A Phase I Archaeological Study for the Proposed Signal Hill Senior Housing Project, Crescent Heights Tract, Walnut and 25th Street, Los Angeles County, California	1999	0.5-1
LA-04750	Duke, Curt	Cultural Resource Assessment for the AT&T Wireless Services Facility Number C574, County of Los Angeles, California	1999	0.25-0.5
LA-04752	Duke, Curt	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 629-02, County of Los Angeles, California	1999	0.5-1
LA-05121	Duke, Curt	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 629-03, County of Los Angeles, Ca	2000	0.5-1

Report No.	Author(s)	Title	Year Recorded	Distance from PA (miles)
LA-05215	McKenna, Jeanette A.	A Cultural Resources Investigation of the Proposed Long Beach Ocean Desalination Project, Long Beach, Los Angeles County, California	2001	0-0.25
LA-06828	Harper, Caprice D.	Cultural Resource Assessment Cingular Wireless Facility No. Sm 221-01signal Hill, Los Angeles County, California	2003	0.25-0.5
LA-06837	Greenwood, Roberta S.	Cultural Resources Monitoring: Northeast Interceptor Sewer Project	2003	0.25-0.5
LA-08454	Hudlow, Scott M.	A Phase I Cultural Resources Survey for Property at 27th West and Avenue K-8, City of Lancaster, California	2004	0.25-0.5
LA-08484	Schmidt, Andrew and Noelle Storey	Draft: Historical Resources Assessment of 1777 and 1778 East 20th Street, City of Signal Hill for the Long Beach Unified School District	2003	0.5-1
LA-08898	Baker, Cindy and Mary L. Maniery	Cultural Resource Inventory and Evaluation of United States Army Reserve 63d Regional Readiness Command Facilities	2007	0-0.25
LA-09145	Bonner, Wayne H.	Direct APE Historic Architectural Assessment for Royal Street Communications, LLC Candidate LA2892C (SCE Hinson Harbor), 2377 West Willow Street, Long Beach, Los Angeles County, California	2007	0-0.25
LA-10771	Feldman, Jessica B.	Historical Assessment and Impacts Discussion for the Proposed Terminal Improvements, Long Beach Airport	2005	0.5-1
LA-11071	McKenna, Jeanette A.	LBSD-04.2 - Task 92. Archaeological Site Visit, Browning High School Site	2011	0.25-0.5

The results of these studies indicated that no cultural resources have been previously recorded within the Project Area. A total of three cultural resources have been previously documented within the one-mile search radius (Table 3). These consist of one prehistoric site, and two historic resources.

**TABLE 3. PREVIOUSLY RECORDED RESOURCES WITHIN A ONE-MILE RADIUS OF THE PROJECT AREA**

Primary No. (P-19-)	Trinomial / HRI	Resource Type	Resource Description	Date Recorded	Distance from PA (in miles)	NRHP Status Code
000837	CA-LAN-837	Prehistoric Site	Shell midden	1973	0-0.25	N/A
179272	029961	California Registered Historical Landmark: No. 580	Well, "Alamitos 1". This discovery well led to the development of one of the most productive oil fields in the world and helped to establish California as a major oil producing state.	1980	0.25-0.5	N/A

Primary No. (P-19-)	Trinomial / HRI	Resource Type	Resource Description	Date Recorded	Distance from PA (in miles)	NRHP Status Code
187956		Historic Resource	Military Property, Contemporary-style, "Schroeder Hall USAR Center": 1960	2006	0.25-0.5	3S

## OTHER SOURCES

In addition to the records at the SCCIC, Ms. Wilson consulted a variety of sources in August 2017 to obtain information regarding the cultural context of the Project Area (Table 4). Sources included the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), California Historical Resources Inventory (CHRI), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Specific information about the Project Area, obtained from historic maps and aerial photographs, is presented in the Project Area History.

**TABLE 4. ADDITIONAL SOURCES CONSULTED**

Source	Results
National Register of Historic Places (NRHP; 1979-2002 & supplements)	Negative
Historic USGS Topographic Maps	The earliest USGS topographic map for the PA is the 1896 Downey 15' map that shows a southeast to northwest oriented street diagonally bisecting the PA, no other features appear within the PA. The 1942 Downey 15' shows an unimproved road that loops through the center of the PA, originating from Redondo Avenue.

Source	Results
Historic US Department of Agriculture Aerial Photographs	The 1952 aerial shows the northern portion of the PA as undeveloped. The southern portion is developed in what appears to be for industrial (oil) or municipal (water treatment) use with a small circular storage structure on the center of the southern boundary. The 1963 aerial shows a structure on the northwestern boundary of the PA. By 1972, the southern portion has been graded over and only the two small structures on the Northwest boundary remain.
California Register of Historical Resources (CRHR; 1992-2014)	Negative
California Historical Resources Inventory (CHRI; 1976-2014)	Negative
California Historical Landmarks (CHL; 1995 & supplements to 2014)	Negative
Local Historic Inventories, Long Beach and Signal Hill	Negative
California Points of Historical Interest (CPHI; 1992 to 2014)	Negative
Bureau of Land Management (BLM) General Land Office Records	Positive: Abel Stearns, 1851, Spanish/Mexican Grant

In addition, three local historical societies were contacted requesting information regarding the historical context of the GMF Long Beach Station Post Office located at 2300 Redondo Avenue, Long Beach. Requests for information were sent out vial USPS mail on August 1, 2017 to the Long Beach Historical Society, Long Beach Heritage, and Signal Hill Historical Society. To date one response was received from Long Beach Heritage organization.

- On August 21, 2017, Ms. Cheryl Perry, president of Long Beach Heritage informed that a dedication plaque is located on GMF Long Beach Station Post Office building. She requested that it be saved and donated to the Long Beach Historical Society. Ms. Perry's response letter can be found in Appendix B of this report.

## NATIVE AMERICAN CONSULTATION

A Sacred Lands File search request was submitted to the Native American Heritage Council (NAHC) on July 6, 2017. The NAHC replied on July 7, 2017 that a search of their records

returned negative results for sacred sites located within the Project Area. The NAHC requested that five tribal organizations be consulted about the Project and the City of Long Beach received one more tribal organization in addition to the NAHC list making a total of six tribal organizations. The City of Long Beach mailed letters on July 26, 2017 to all six of the tribal contacts. The letter provided Project information and requested any information related to tribal cultural resources within or adjacent to the Project Area. One response was received from Andrew Salas of the Gabrieleno Band of Mission Indians-Kizh Nation:

- On August 4, 2017, Mr. Andrew Salas of the Gabrieleno Band of Mission Indians-Kizh Nation requested to consult with the City of Long Beach for the 2300 Redondo Avenue Project.

## **SURVEY**

### **METHODS**

The survey stage is required in a Project's environmental assessment phase to verify the exact location of each identified cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resource sensitivity. The survey consisted of walking parallel transects, spaced no greater than 15-meter intervals within the Project Area while closely inspecting the ground surface. All undeveloped ground surface areas within the ground disturbance portion of the Project Area were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the Project Area, including ground surface visibility and items of interest, were taken with a digital camera.

Cogstone archaeologist, Megan Wilson completed an intensive-level pedestrian survey of the 19 acre Project Area on August 4, 2017.

### **RESULTS**

The majority of the Project Area was hardscaped (95%). The property is occupied by the GMF Long Beach Station Post Office which includes a large USPS mail processing facility, vehicle maintenance facility, and parking lots. Overall, ground visibility was very poor (<5%). The majority of the survey consisted of walking the perimeter of the Project Area where unpaved

areas were located and where the ground surface was visible. Here visibility ranged from poor (40%) in landscaped areas to excellent (90%) where landscaping was not well maintained and the ground surface was exposed (Figure 10).



**Figure 9. USPS Facility Public entrance, view northwest**



**Figure 10. East elevation of the USPS facility, view north**

## **TRIBAL CULTURAL RESOURCES**

No tribal resources have previously been recorded on the property nor were any located by the current survey.

## **STUDY FINDINGS AND CONCLUSIONS**

Surface survey of the Project Area did not locate any cultural resources. Research utilizing historic aerial images and topographic maps shows that three historic structures once stood within the Project Area; two on the northwestern edge of the Project Area along Redondo Avenue and a circular structure located along the south center boundary of the Project Area. No historic structural remains were located during the pedestrian survey. The GMF Long Beach Station Post Office located at 2300 Redondo Avenue itself is not historic in age nor does the building meet the applicable criteria of historic significance required to be determined a historic resource. The Project Area has a low probability for cultural resources.

## **RECOMMENDATIONS**

Based on the pedestrian survey and background study, we consider the Project Area to have a low probability for cultural resources. This Project has little potential to impact intact subsurface resources and no further cultural resources work is recommended for the Project. A finding of no impact is warranted for this Project.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist can evaluate the potential resource. In the unlikely event that human remains are encountered during Project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with

appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

## REFERENCES CITED

Bancroft, Hubert Howe

1886 History of California, Volume I (1542-1800). *The Works of Hubert Howe Bancroft, Volume XVIII*. The History Company, Publishers, San Francisco.

Bean, W. and J.J. Rawls

1993 *California: An Interpretive History*. 4th Edition. McGraw Hill, New York.

Bean, Lowell John, and C.R. Smith

1978 Gabriellino. In California. Robert F. Heizer, ed. Pp. 538–549. *Handbook of North American Indians* 8. Smithsonian Institution, Washington DC

Blackburn O.V

1935 Blackburn's Map of Orange County: Showing Citrus Area and Landowners. On file at the Los Angeles Public Library

Cal-IPC

2006 California Invasive Plant Inventory, Cal-IPC Publication 2006-02. Berkeley, CA: The California Invasive Plant Council. Accessed online August 4, 2017 <http://cal-ipc.org/ip/inventory/pdf/Inventory2006.pdf>.

Caughman, Madge, and Joanne S. Ginsberg, eds.

1987 *California Coastal Resource Guide*. 1st ed. California Coastal Commission. University of California Press, Berkeley.

City of Signal Hill

n.d The History of Signal Hill. Accessed online August 4, 2017 at <http://www.cityofsignalhill.org/index.aspx?NID=218>.

COHP California Office of Historic Preservation

n.d. California Environmental Quality Act (CEQA) and Historical Resources in *California Office of Historic Preservation Technical Assistance Series #1*, Office of Historic Preservation, California Department of Parks and Recreation, Sacramento, CA.

County of Los Angeles

n.d. Los Angeles County Assessor's Office, Assessor Portal, AIN: 7218028901. Accessed online August 4, 2017 <https://portal.assessor.lacounty.gov/parceldetail/7218028901>

Dixon Davis and the Signal Hill Historical Society.

2006 *Images of America: Signal Hill*. Arcadia Publishing, Charleston SC.

Gabrielino/Tongva Tribal Council of San Gabriel

2015 Tribal History. Gabrielino-Tongva Tribe. Accessed online April 5, 2017. <http://www.gabrielinotribe.org/historical-sites-1/>

Garoogian, David

- 2013 *Profiles of California: Facts, Figures, and Statistics for 1,782 Populated Places in California*. Third edition. Grey House Publishing. Amenia, US. Accessed online July 7, 2016 <http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10769687>

Kroeber, Alfred L.

- 1976 *Handbook of the Indians of California*. Dover Publications, New York.

Martinez, Desiree, and Wendy G. Teeter

- 2015 Ho'eexokre "eyookuuka"ro "We're Working with Each Other": The Pimu Catalina Island Project. *SAA Archaeological Record* 15(1): 25–28.

McCawley, William

- 1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning.

Mithun, Marianne

- 1999 *The Languages of Native North America*. Cambridge Language Surveys. Cambridge University Press, Cambridge, UK.

NETR (Nationwide Environmental Title Research, LLC)

- 1934 USGS Long Beach, Calif. 7.5 min quad, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August 4, 2017
- 1942 USGS Long Beach, Calif. 7.5 min quad, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August, 2017
- 1964 USGS Long Beach, Calif. 7.5 min quad, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August, 2017
- 1972 USGS Long Beach, Calif. 7.5 min quad, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August, 2017
- 1952 Aerial photograph, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August 4, 2017
- 1963 Aerial photograph, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August 4, 2017
- 1972 Aerial photograph, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August 4, 2017
- 1994 Aerial photograph, accessed online at [www.historicaerials.com](http://www.historicaerials.com) on August 4, 2017

Palmer, Tim

- 2012 *Field Guide to California's Rivers*. California Natural History Guides. University of California Press, Berkeley.

Rawls, James J., and Walton Bean

- 1993 *California: An Interpretive History*. 6th ed. McGraw-Hill, New York.

Robinson, W. W.

- 1948 *Land in California, the Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip [and] Homesteads*. University of California Press, Berkeley.

1966 Los Alamitos: The Indian and Rancho Phases. *California Historical Society Quarterly* 45(1): 21–30.

SCEDC Southern California Earthquake Data Center

n.d. Significant Earthquakes and Faults: Newport-Inglewood Fault Zone. Accessed online on August 4, 2017, <http://scedc.caltech.edu/significant/newport.html>

Schoenherr, Allan A.

1992 *A Natural History of California*. University of California Press, Berkeley.

Sutton, Mark Q.

2010 The Del Rey Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(2): 1–54.

Sutton, Mark Q., and Jill Gardner

2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4): 1–64.

Wallace, William J.

1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3): 214–230.

Warren, Claude N.

1967 The Southern California Milling Stone Horizon: Some Comments. *American Antiquity* 32(2): 233–236.

Wilson, Bert

2016 Native Plants of Los Angeles, Long Beach Area. Las Pilitas Nursery. Accessed online March 31, 2017 <http://www.laspilitas.com/nature-of-california/native-plants-los-angeles.html>

Wilson, John Albert

1880 *History of Los Angeles County, California, with Illustrations Descriptive of Its Scenery, Residences, Fine Blocks and Manufactories*. Thompson & West, Oakland, CA.

Sutton, M. and J. Gardner

2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64

## **APPENDIX A: QUALIFICATIONS**



PALEONTOLOGY - ARCHAEOLOGY - HISTORY

**MOLLY VALASIK**  
Principal Archaeologist Investigator

**EDUCATION**

- 2009 M.A., Anthropology, Kent State University, Kent, Ohio  
 2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

**EXPERIENCE**

Ms. Valasik is a Registered Professional Archaeologist with eight years of professional experience. She is a skilled professional who is well-versed in the compliance procedures of CEQA and Section 106 of the NHPA and regularly prepares cultural resources assessment reports for a variety of federal, state, and local agencies throughout California. She has managed local assistance projects involving sidewalk, road, interchange, and bridge improvements with Caltrans/FHWA as the lead agency. In addition, she has prepared cultural resources reports for CEQA/EIR compliance documents for project-level and program-level Specific Plans, General Plans, Master Plans, and Zoning Amendments for mixed-use, residential, commercial and industrial developments. She meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.

**SELECTED PROJECTS**

**Old Town Streetscape, Phase 2, Caltrans District 3, City of Elk Grove, Sacramento County, CA.** The City proposed construction of bump outs, sidewalk widening, bus lanes, etc. within a National Register-listed historic district. Managed cultural studies including record search, Sacred Lands File search, Native American consultation, intensive-level pedestrian archaeological and architectural surveys, as well as coordination and approval by District 3 of an APE map. The District record was updated. Author of Archaeological Survey Report and Historic Properties Survey Report. Sub to Michael Baker/PMC. Project Manager/Principal Investigator. 2016

**SR-138 Palmdale Boulevard PA/ED (Sierra Highway), Caltrans District 7, City of Palmdale, Los Angeles County, CA.** The project involved widening State Route 138 and Sierra Highway. Managed cultural studies including record search, Sacred Lands File search, Native American consultations, and intensive-level pedestrian archaeological survey, as well as coordinated approval by District 7 of an APE map. Co-author of the Archaeological Survey Report and Historic Properties Survey Report. Sub to Parsons Transportation. Project Manager/Principal Investigator. 2016

**Paradise Valley Specific Plan, County of San Bernardino, near Indio, CA.** The proposed project, encompassing 5,411 acres, consists of the construction of a planned community. Directed archaeological survey and extended Phase I activities. Lead author of assessment report. Managed subsequent supplemental survey and updated report. Sub to Envicom. Field Director and GIS Manager. 2011-2013; 2014; 2016

**Arlington Avenue Widening, Caltrans District 8, City of Riverside Public Works, Riverside County, CA.** The City proposed widening Arlington Avenue one linear mile in order to construct safety improvements. Managed cultural studies including record search, Sacred Lands File search, Native American consultations, and intensive-level pedestrian archaeological survey of the 5-acre site with negative results, as well as coordinated approval by District 8 of an APE map. Co-author of the Archaeological Survey Report and Historic Properties Survey Report. Sub to Michael Baker. Project Manager/Co-Principal Investigator. 2015

**Folsom Boulevard Streetscape Enhancement, Caltrans District 3, City of Rancho Cordova, Sacramento County, CA.** The City proposed to construct sidewalks, bike lanes, medians, safety fencing, and street and pedestrian lighting along Folsom Boulevard. Managed cultural studies including record search, Sacred Lands File search, Native American consultations, and intensive-level pedestrian archaeological survey, as well as coordination and approval by District 3 of an APE map. Author of Archaeological Survey Report and Historic Properties Survey Report. Sub to Michael Baker/PMC. Project Manager/Principal Archaeologist. 2015



**MEGAN PATRICIA WILSON**  
Archaeologist/GIS Specialist

#### **EDUCATION**

- 2014 M.A. Anthropology, California State University, Fullerton *cum laude*  
 2013 GIS Certificate, California State University, Fullerton  
 2006 B.A., Anthropology, University of California, Los Angeles *cum laude*

#### **SUMMARY QUALIFICATIONS**

Ms. Wilson is a Registered Professional Archaeologist and cross-trained paleontologist with experience in survey, excavation, and laboratory preparation/curation analysis. Her key research areas include prehistoric subsistence and settlement patterns of coastal southern California, protohistoric and historic archaeology of southern California and the Great Basin, and paleoenvironmental reconstructions based on archaeological flora and faunal analysis. She is GIS proficient and assists with the digitizing and mapping of spatial data for archaeology projects. Ms. Wilson has five years of experience in southern California archaeology and is an expert in prehistoric and historic Orange County archaeology and artifact identification.

#### **SELECTED PROJECTS**

**Paradise Valley Specific Plan, Glorious Land Company, unincorporated Riverside County, CA.** The project involves construction of a master-planned community. Of the 5,000-acre project area, 1,800 acres are slated for development, leaving the remaining 3,200 acres as open space. Coordination with the BLM was required regarding off-site power and fiber optic lines situated on federal lands. Conducted records search and archive research. Cogstone also conducted NAHC consultation, archaeological and paleontological resources survey and APE mapping for inclusion in the Supplemental Phase I Cultural Resources Assessment Report. Archaeologist 2014

**I-15 Limonite Interchange Improvement, County of Riverside/Caltrans District 8, Jurupa Valley/Eastvale, Riverside County, CA.** Prepared GIS maps for inclusion in a Paleontological Mitigation Plan (PMP). Sub to Dokken Engineering. GIS Specialist. 2015

**Dune Palms Bridge, Project Design and Environmental Documents, La Quinta, Riverside County, CA.** The project involved replacing a low water crossing spanning the Coachella Valley Storm Water Channel at Dune Palms Road. Conducted record search, sacred lands search, and NAHC consultation. Cogstone also conducted an intensive field survey, APE mapping, and prepared a Historic Properties Survey Report (HPSR) with appended Archaeological Survey Report (ASR) to support the PA&ED/PSR/PS&E documents. In addition, the project is located within known boundaries of prehistoric Lake Cahuilla, which has previously produced significant fossils. Cogstone conducted a paleontological sensitivity analysis and prepared a Paleontological Identification Report (PIR). Sub to Parsons Brinckerhoff. Archaeologist. 2014

**Temecula Park and Ride at I-15, Caltrans District 8, Temecula, Riverside County, CA.** Conducted records search, sacred land search, NAHC consultation, and created all project maps for inclusion in Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR). This project involved the construction of a park and ride area. Sub to Michael Baker/RBF. Archaeologist. 2014

**WECC Path 42, Southern California Edison, Thousand Palms, Riverside County, CA.** Updated maps and graphics for inclusion in a cultural resources monitoring compliance report documenting activities associated with the construction and demolition of tower and guard structures for the Devers-Mirage Circuit. GIS Specialist. 2014

## EDUCATION

- 1994 M. S., Anatomy (Evolutionary Morphology), University of Southern California, Los Angeles  
1979 B. S., Anthropology (Physical), University of California, Davis

## SUMMARY QUALIFICATIONS

Ms. Gust is an Orange County Certified Professional Paleontologist and Archaeologist and a Registered Professional Archaeologist with more than 30 years of experience in cultural resources management. She is accepted as a principal investigator for both prehistoric and historical archaeology by the State Office of Historic Preservation's Information Centers and exceeds the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.

## SELECTED PROJECTS

### **SR-138 Palmdale Boulevard Improvements (Sierra Highway), Caltrans District 7 Palmdale, Los Angeles County, CA.**

The project involves widening and modifying three southbound lanes on Sierra Highway to Avenue R at the railroad crossing. Managed a cultural resources assessment to support the Project environmental documents (IS/MND) in compliance with NEPA and CEQA. Services for this Local Assistance Project, on behalf of the City of Palmdale, included records search, Sacred Lands File search, Tribal consultation, intensive-level field survey, finalization of the APE map in concurrence with Caltrans District 7, and preparation of an ASR technical report. Sub to Parsons. Project Manager/QA&QC. 2015-2016

**High Desert Corridor, Caltrans Districts 7 & 8, Los Angeles and San Bernardino Counties, CA.** The project was a proposed new 63 mile long freeway and rail line from SR 14 in Palmdale to SR 18 in Apple Valley. The documents produced were Historical Properties Survey Report, Archaeological Survey Report, Historical Resources Evaluation Report, Extended Phase I Testing Report for three sites, Extended Phase I and Archaeological Evaluation Report for 20 Phased Sites and one District, Supplemental Historic Properties Survey Report and Archaeological Survey Report, Finding of Effect, Programmatic Agreement, Historic Properties Treatment Plan and combined Paleontological Identification and Evaluation Report. Sub to Parsons Transportation. Project Manager and Principal Archaeologist/Paleontologist. 2013-2015

**Purple Line Extension (Westside Subway), Metro/FTA, Los Angeles.** The project involves extension of the subway from Wilshire/Western to the VA Facility in Westwood for 9 miles. Cogstone prepared the supplemental Archaeology and Architectural History Reports and the cultural and paleontological sections of the FEIS/FEIR. Cogstone subsequently prepared the cultural and paleontological mitigation and monitoring plans for the entire project. Currently providing monitoring and all other cultural and paleontological services for Section One of the project. Sub to WEST. Project Manager & Principal Archaeologist/Paleontologist. 2011-present

### **Historical Sites Preservation, Veterans Affairs Long Beach Healthcare System, Long Beach, Los Angeles County, CA.**

The undertaking involved eleven projects, divided into two construction phases for improvements to the campus. Cogstone conducted evaluation of all buildings on campus and determined recommended none were eligible for the National Register and SHPO concurred. One National Register-listed prehistoric archaeological site, the Puvungna Indian Village, is known on the campus. Documents prepared were Evaluation Report, POA, MOA, HPTP with monitoring. Prime. Project Manager and Principal Archaeologist. 2014-15

**APPENDIX B: NATIVE AMERICAN AND HISTORICAL SOCIETY  
CONSULTATION**

## Local Government Tribal Consultation List Request

**Native American Heritage Commission**  
**1550 Harbor Blvd, Suite 100**  
**West Sacramento, CA 95691**  
**916-373-3710**  
**916-373-5471 –**  
**Fax nahc@nahc.ca.gov**

### Type of List Requested

X **CEQA Tribal Consultation List (AB 52) – Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2**

### Required Information

**Project Title:** 2300 Redondo Avenue Project

**Local Government/Lead Agency:** City of Long Beach

**Contact Person:** Craig Chalfant

**Street Address:** 333 W Ocean Blvd, 5<sup>th</sup> Floor **City:** Long Beach **Zip:** 90802

**Phone:** 562-570-6368

**Fax:** 562-570-6068

**Email:** craig.chalfant@longbeach.gov

### **Specific Area Subject to Proposed Action**

**County:** Los Angeles

**City/Community:** Long Beach

### **Project Description:**

The proposed 2300 Redondo Avenue Project (herein referenced as the “project”) involves construction of three buildings encompassing 427,548 square feet of warehouse/distribution/logistics uses with supporting office facilities and 638 parking spaces on a 19.09-acre site within the City of Long Beach (City).

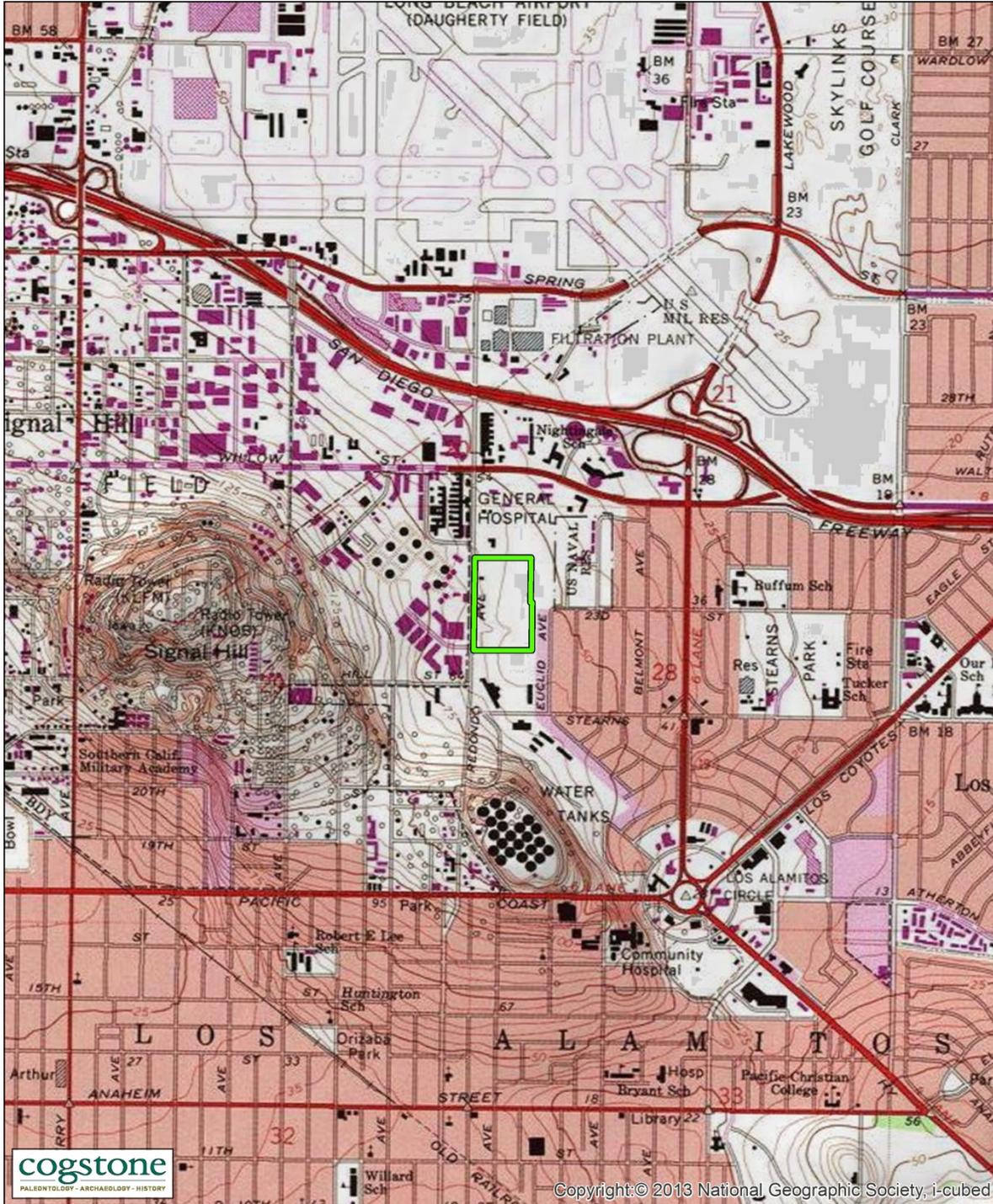
The existing USPS facility was constructed in the late 1970’s and expanded in the early 2000’s to include an approximately 337,409 square-foot mail processing/vehicle maintenance facility and retail office (known as GMF Long Beach). The primary components of the facility include a 323,933 square-foot mail processing building and 11,456 square-foot vehicle maintenance facility. Most of the site is paved, for the purposes of drive aisles, loading areas, and surface parking. Limited ornamental landscaping, including trees, shrubs, and groundcover is located along the site boundary and the eastern side of the mail processing facility.

### Additional Request

X **Sacred Lands File Search - Required Information:**

**USGS Quadrangle Name(s):** Long Beach

**Township:** 4S **Range:** 12W **Section(s):** 28 & 29



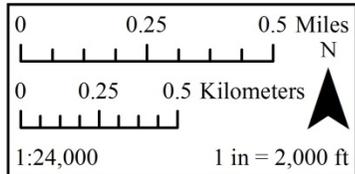
Copyright: © 2013 National Geographic Society, i-cubed

**2300 Redondo Avenue Project**

City of Long Beach  
Los Angeles County, CA

USGS 7.5' Quads:  
LONG BEACH

 Project Area



**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
 1550 Harbor Blvd., Suite 100  
 West Sacramento, CA 95691  
 (916) 373-3710



July 7, 2017

Craig Chalfant  
 City of Long Beach

Sent by E-mail: craig.chalfant@longbeach.gov

RE: Proposed 2300 Redondo Avenue Project, City of Long Beach; Long Beach and Los Alamitos USGS  
 Quadrangles, Los Angeles County, California

Dear Mr. Chalfant:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the reference codes below is to avoid or mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

**Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
  - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
  - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
  - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:
  - Any report that may contain site forms, site significance, and suggested mitigation measures.  
  
All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.
3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the project with negative results however the area is sensitive for potential tribal cultural resources.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

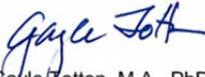
Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: [gayle.totton@nahc.ca.gov](mailto:gayle.totton@nahc.ca.gov).

Sincerely,



Gayle Totton, M.A., PhD.  
Associate Governmental Program Analyst



# CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES  
333 West Ocean Blvd., 5<sup>th</sup> Floor, Long Beach, CA 90802 Phone: 570-6194 Fax: 570-6068

PLANNING BUREAU

July 26, 2017

[Name  
Tribal Organization  
Address  
City, CA, Zip]

Re: AB-52 Consultation with the [Tribal Organization] for the City of Long Beach 2300 Redondo Avenue Project

Dear [Representative]:

The City of Long Beach is conducting its Assembly Bill (AB) 52 consultation process for the 2300 Redondo Avenue Project. Please consider this letter and preliminary project information as the initiation of the California Environmental Quality Act (CEQA), specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB-52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

**PROJECT TITLE:** 2300 Redondo Avenue Project

3. **PROJECT LOCATION:** 2300 Redondo Avenue, Long Beach, California (refer to Figure 1, attached).

**PROJECT DESCRIPTION:** The proposed 2300 Redondo Avenue Project (herein referenced as the "Project") involves construction of a proposed warehouse/distribution/logistics facility on a 19.09-acre site within the City of Long Beach (refer to Figure 2). The proposed project would occur within a property currently occupied by an existing United States Postal Service (USPS) mail processing/vehicle maintenance facility and retail office. This USPS facility would be demolished and replaced by a new 427,548 gross square-foot facility within three industrial buildings, and 638 surface parking spaces (refer to Figure 3). Ancillary facilities would include utilities, landscaping, and on- and off-site circulation improvements. Project implementation would include a zone change and zoning code amendment along with approval of a tentative parcel map and site plan. An Initial Study/Mitigated Negative Declaration is currently being prepared for the proposed project under the requirements of CEQA.

Your comments and concerns are important to the City of Long Beach in moving forward with this project. If you have any questions or concerns with the project, please contact me at:

**Craig Chalfant**

Senior Planner | City of Long Beach  
333 West Ocean Boulevard, 5th floor | Long Beach, CA 90802  
craig.chalfant@longbeach.gov | 562.570.6368

[Name]

July 26, 2017

Page 2

Please be advised that the [Tribal Organization] has 30 days upon receipt of this letter to provide input regarding this project.

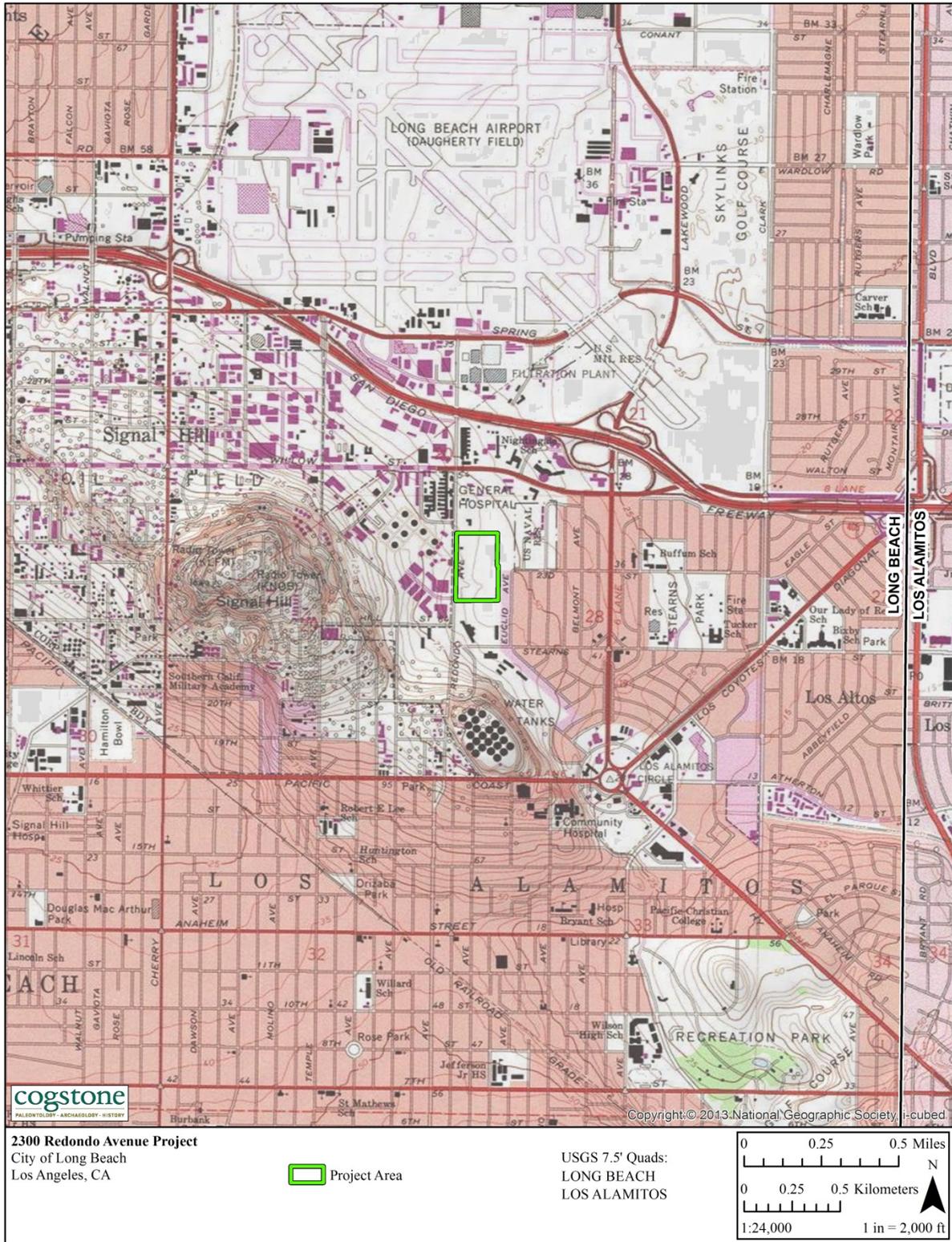
Sincerely,

Craig Chalfant  
City of Long Beach

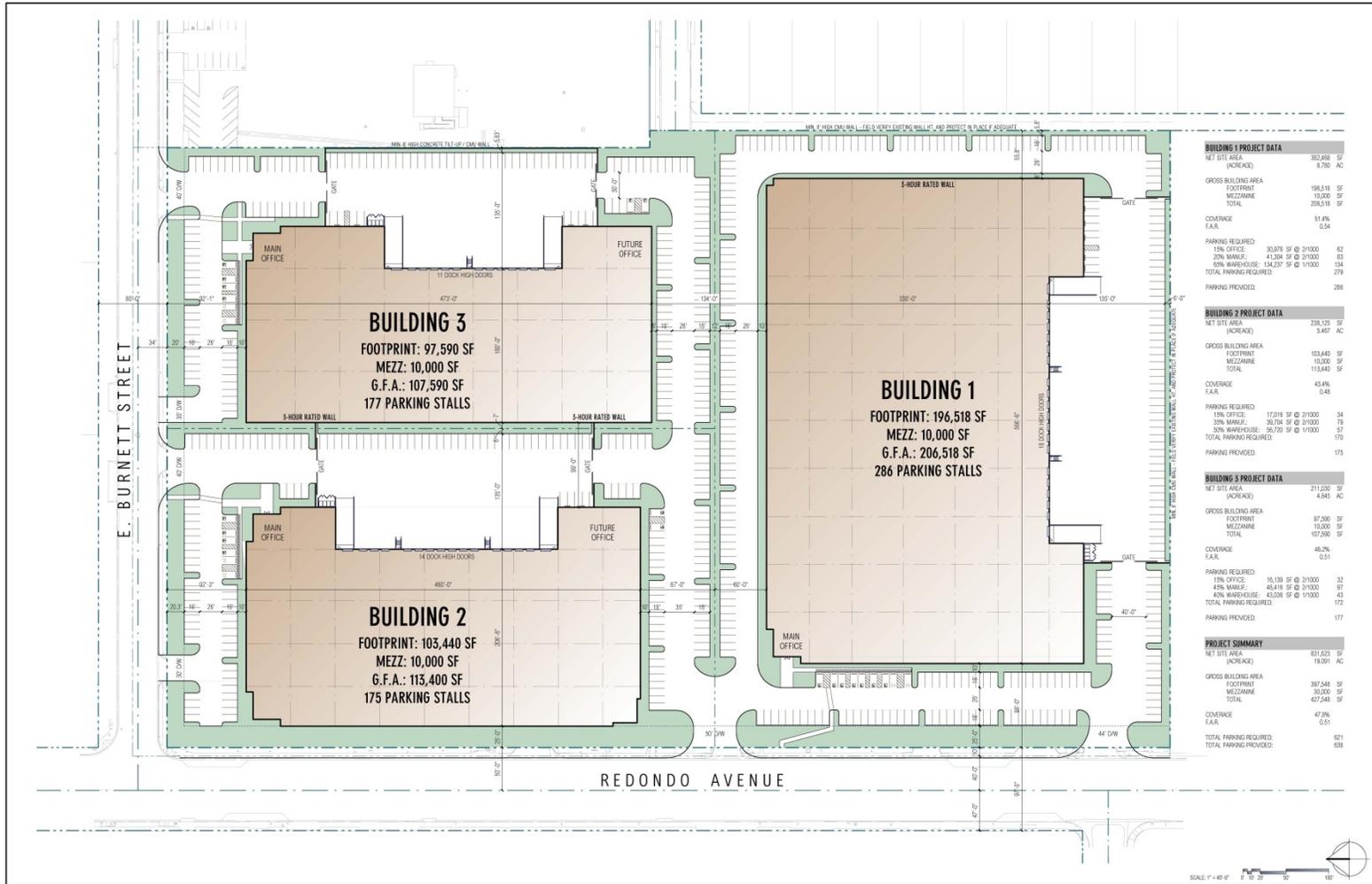
**Attachments:**      Project Vicinity Map  
                             Project Location Map  
                             Project Concept Plan



**Figure 1. Project Vicinity**



**Figure 2. Project Location**



# PACIFIC EDGE

S.E. CORNER OF REDONDO AVE. & BURNETT STREET

PRELIMINARY SITE PLAN - SCHEME 01r3

DATE	01/15/2018
BY	ARCHITECT
CHKD	ARCHITECT
APP'D	ARCHITECT
DATE	01/15/2018
BY	ARCHITECT
CHKD	ARCHITECT
APP'D	ARCHITECT
DATE	01/15/2018
BY	ARCHITECT
CHKD	ARCHITECT
APP'D	ARCHITECT

**A1-1**

Figure 3. Project Concept Plan



August 1, 2017

Historical Society  
Address  
City, CA Zip

RE: Invitation to Consult for the 2300 Redondo Avenue Project, City of Long Beach, Los Angeles County, California.

Dear Representative,

The City of Long Beach (City) proposes the construction of three buildings encompassing 427,548 square feet of warehouse/distribution/logistics uses with supporting office facilities and 638 park in spaces on a 19.09 acre site within the City of Long Beach (Figures 1, 2, and 3).

Please consider this letter and preliminary Project information as the formal notification of the proposed Project. The City is requesting to consult with the Long Beach Heritage in order to identify historic resources that may be impacted by the proposed Project.

A search for cultural resources records was completed at the South Central Coastal Information Center (SCCIC) at California State University, for the proposed Project area as well as a one-mile radius buffer this month: No historic resources are located within the Project area. The City of Long Beach would appreciate receiving any comments, issues and/or concerns relating to historic resources that you may have within the Project area. All information provided will be kept confidential.

Sincerely,

Megan Wilson  
Archaeologist

Attachments: Project Vicinity Map  
Project Location Map  
Project Aerial



Figure 11. Project vicinity Map

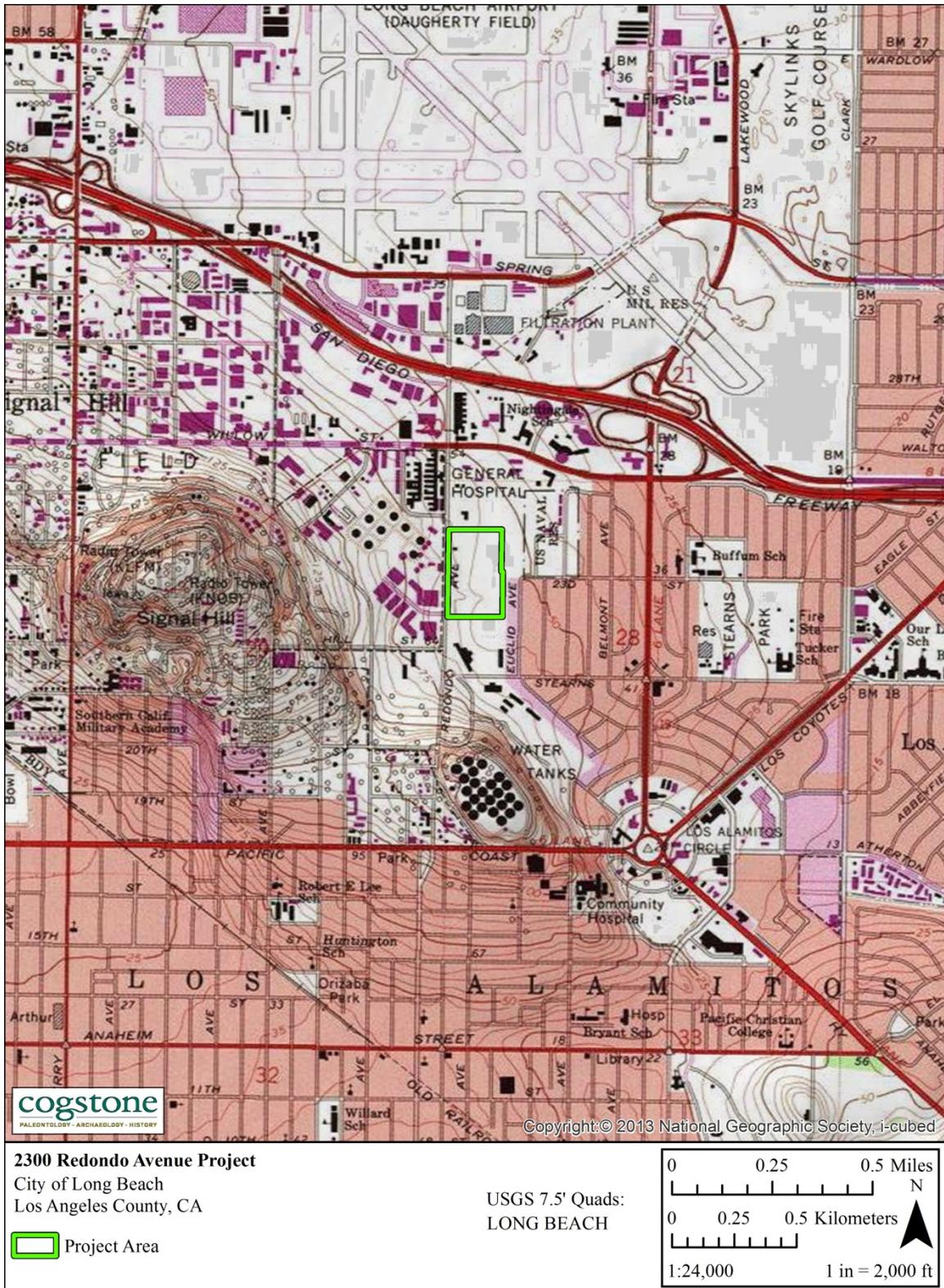


Figure 12. Project Vicinity

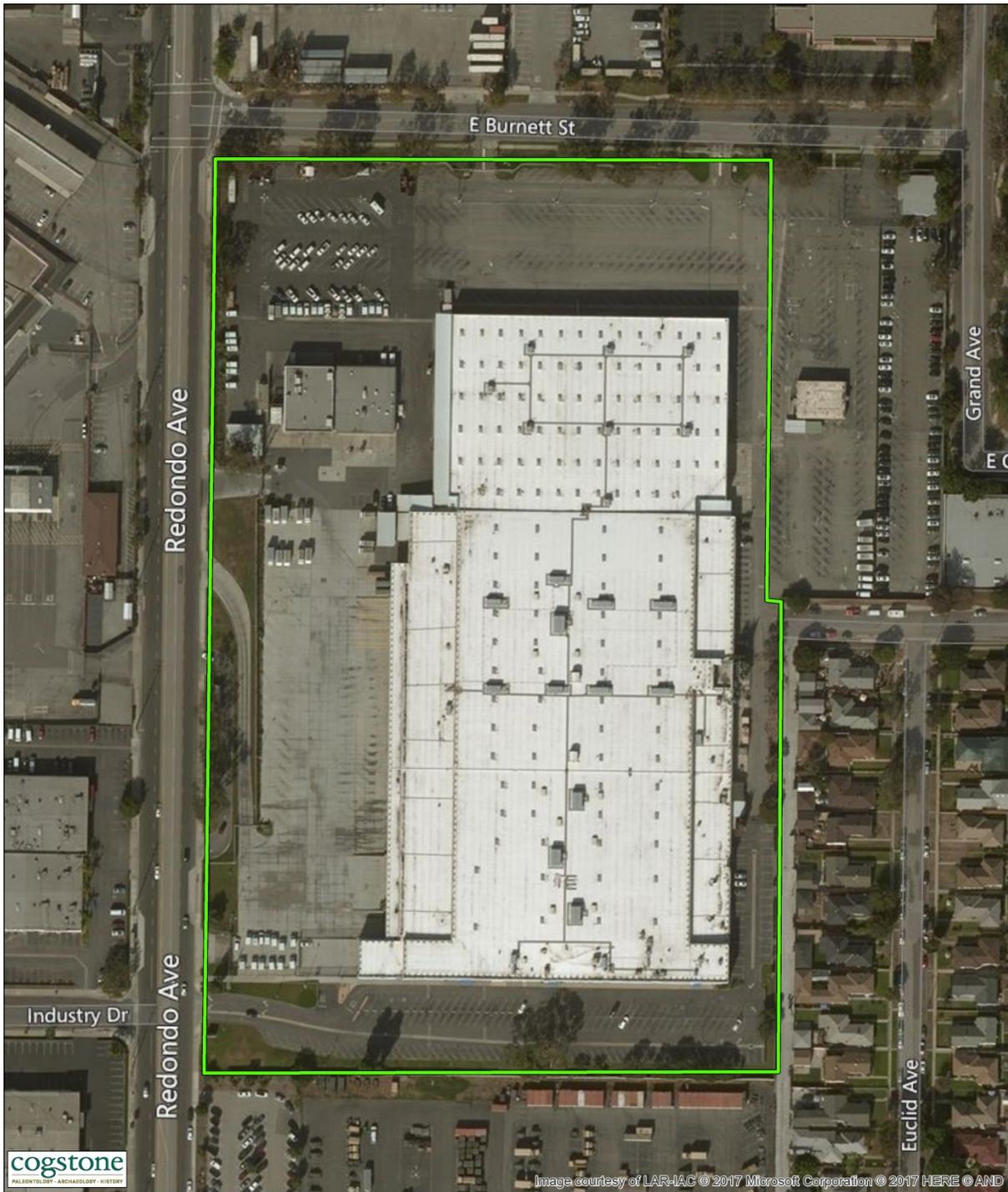
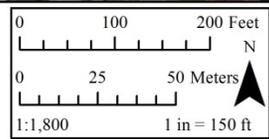


Image courtesy of LAR-IAC © 2017 Microsoft Corporation © 2017 HERE © AND

**2300 Redondo Avenue Project**  
 City of Long Beach  
 Los Angeles County, CA

 Project Area

USGS 7.5' Quads:  
 LONG BEACH



**Figure 13. Project Aerial**

### Tribal and Historical Society Contact Log

<b>Native American Group/Individual</b>	<b>Date(s) and Method AB 52 Contact Attempt</b>	<b>Date(s) of Replies Rec'd</b>	<b>Comments</b>	<b>Tribal Cultural Resources Present</b>
Gabrieleno Band of Mission Indians-Kizh Nation Andrew Salas, Chairperson	7/27/2017, Certified Mail	8/4/2017	On August 4, 2017, Mr. Andrew Salas of the Gabrieleno Band of Mission Indians-Kizh Nation requested AB52 consultations with the City Long Beach. He indicated that the Project Area is located within the Tribe's ancestral territory. He further indicated that the Project Area is located in a culturally sensitive area.	Unknown
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson	7/27/2017, Certified Mail	N/A	No Response	Unknown
Gabrielino/Tongva Nation Sandonne Goad, Chairperson and Sam Dunlap	7/27/2017, Certified Mail	N/A	No Response	Unknown
Gabrielino Tongva Indians of California Tribal Council Robert F. Dorame, Chairperson	7/27/2017, Certified Mail	N/A	No Response	Unknown
Gabrielino-Tongva Tribe Charles Alvarez	7/27/2017, Certified Mail	N/A	No Response	Unknown
Tongva Ancestral Territorial Tribal Nation John Tommy Rosas	7/27/2017, Certified Mail	N/A	No Response	Unknown
<b>Historical Society Consultations</b>				
<b>Historical Society</b>	<b>Date(s) and Method of Contact Attempt</b>	<b>Date(s) of Replies Rec'd</b>	<b>Comments</b>	<b>Historical Resources Present</b>
Long Beach Heritage	8/1/2017, letter	8/21/2017	On August 21, 2107, Ms. Cheryl Perry, president of Long Beach Heritage informed that a dedication plaque is located on GMF Long Beach Station Post Office building. She requested that it be saved and donated to the Long Beach Historical Society.	Yes, historic dedication plaque
Long Beach Historical Society	8/1/2017, letter	N/A	No Response	Unknown
Signal Hill Historical Society	8/1/2017, letter	N/A	No Response	Unknown



## GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians  
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

City of Long Beach  
333 West Ocean blvd 5<sup>th</sup> Floor  
Long Beach, CA 90802

August 4, 2017

Re: AB52 Consultation request for the City of Long Beach 2300 Redondo Ave Project

Dear Craig Chalfant,

Please find this letter as a written request for consultation regarding the above-mentioned project pursuant to Public Resources Code § 21080.3.1, subd. (d). Your project lies within our ancestral tribal territory, meaning belonging to or inherited from, which is a higher degree of kinship than traditional or cultural affiliation. Your project is located within a sensitive area and may cause a substantial adverse change in the significance of our tribal cultural resources. Most often, a records search for our tribal cultural resources will result in a "no records found" for the project area. The Native American Heritage Commission (NAHC), ethnographers, historians, and professional archaeologists can only provide limited information that has been previously documented about California Native Tribes. This is the reason the NAHC will always refer the lead agency to the respective Native American Tribe of the area because the NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & tribal historians are the experts for our Tribe and are able to provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area. Therefore, to avoid adverse effects to our tribal cultural resources, we would like to consult with you and your staff to provide you with a more complete understanding of the prehistoric use(s) of the project area and the potential risks for causing a substantial adverse change to the significance of our tribal cultural resources.

Consultation appointments are available on Wednesdays and Thursdays at our offices at 910 N. Citrus Ave. Covina, CA 91722 or over the phone. Please call toll free 1-844-390-0787 or email [gabrielenoindians@yahoo.com](mailto:gabrielenoindians@yahoo.com) to schedule an appointment.

\*\* Prior to the first consultation with our Tribe, we ask all those individuals participating in the consultation to view a video produced and provided by CalEPA and the NAHC for sensitivity and understanding of AB52. You can view their videos at: <http://calepa.ca.gov/Tribal/Training/> or <http://nahc.ca.gov/2015/12/ab-52-tribal-training/>

With Respect,

Andrew Salas, Chairman

Andrew Salas, Chairman

Albert Perez, treasurer

PO Box 393, Covina, CA 91723

Nadine Salas, Vice-Chairman

Martha Gonzalez Lemos, treasurer

[www.gabrielenoindians.org](http://www.gabrielenoindians.org)

Christina Swindall Martinez, secretary

Richard Gradias, Chairman of the Council of Elders

[gabrielenoindians@yahoo.com](mailto:gabrielenoindians@yahoo.com)

LONG BEACH

# HERITAGE



POST OFFICE BOX 92521 LONG BEACH CA 90809

562.493.7019 LBHERITAGE.ORG

August 21, 2017

Ms. Megan Wilson  
Cogstone  
1518 W. Taft Ave.  
Orange, CA 92865

Re: 2300 Redondo Ave., Long Beach, CA

Dear Ms. Wilson,

In response to your letter dated August 1, 2017 regarding the 2300 Redondo Avenue Project, please be advised that Long Beach Heritage is not aware of any historic resources that may be impacted by the proposed Project.

One item, however, that may be of interest is the dedication plaque on the building. If it is still there, it would be advisable to save it and donate it to the Historical Society of Long Beach.

If you have any further questions please feel free to contact me directly. My email is [perry351@charter.net](mailto:perry351@charter.net) and my cell phone number is (562) 715-0804.

Sincerely,

Cheryl Perry  
President, Long Beach Heritage

## BOARD OF DIRECTORS

PRESIDENT  
CHERYL PERRY

PRESIDENT EMERITUS  
STAN POE

VP EDUCATION  
SAM DRAGGA

VP ADVOCACY  
TAMI DOWGIEWICZ

VP PUBLIC AWARENESS  
JULIE NEMECEK

VP BEMBRIDGE HOUSE  
CHRIS HOGAN

VP MEMBERSHIP  
JACQUELINE CASE

VP FUND DEVELOPMENT  
MELINDA RONEY

BOARD DEVELOPMENT  
CHARLOTTE MITCHELL

GRANT DEVELOPMENT  
ROBERT FINNEY

SECRETARY/TREASURER  
BOBBI BURKET

## BOARD MEMBERS

LOUISE IVERS

JANICE FURMAN

KAREN HIGHBERGER

CHRISTINA YANIS

## EXECUTIVE DIRECTOR

MARY KAY NOTTAGE



**PALEONTOLOGICAL RESOURCES ASSESSMENT FOR  
THE 2300 REDONDO AVENUE PROJECT,  
CITY OF LONG BEACH,  
LOS ANGELES COUNTY, CALIFORNIA**

**Prepared for:**

Alan Ashimine

Michael Baker International

**Author and Principal Investigator:**

Kim Scott, Qualified Principal Paleontologist

**September 2017**

***Cogstone Project Number:*** 4139

***Type of Study:*** Paleontological Assessment

***Sites:*** none within the project boundaries

***USGS Quadrangle:*** Long Beach 7.5'

***Length:*** 19.09 acres

***Key Words:*** late to middle Pleistocene non-marine and nearshore marine deposits / Palos Verdes Sand - moderate but patchy (PFYC 3a)

**TABLE OF CONTENTS**

**SUMMARY OF FINDINGS ..... III**

**INTRODUCTION ..... 1**

    PURPOSE OF STUDY ..... 1

    PROJECT LOCATION AND DESCRIPTION ..... 2

        PROJECT STUDY AREA ..... 2

    PROJECT PERSONNEL ..... 2

**REGULATORY ENVIRONMENT ..... 5**

    CALIFORNIA ENVIRONMENTAL QUALITY ACT ..... 5

    PUBLIC RESOURCES CODE ..... 5

    CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307 ..... 5

**BACKGROUND ..... 6**

    GEOLOGICAL SETTING ..... 6

    PROJECT GEOLOGY ..... 6

**RECORDS SEARCH ..... 7**

    UNDIFFERENTIATED QUATERNARY LOCALITIES ..... 7

    PALOS VERDES SAND ..... 7

**SURVEY ..... 9**

    METHODS ..... 9

    RESULTS ..... 9

**PALEONTOLOGICAL SENSITIVITY ..... 9**

**STUDY FINDINGS AND RECOMMENDATIONS ..... 11**

**REFERENCES CITED ..... 12**

**APPENDIX A: QUALIFICATIONS ..... 13**

**APPENDIX B. RECORD SEARCH ..... 15**

**APPENDIX C. FOSSILS IN THE VICINITY OF THE PROJECT ..... 18**

**APPENDIX D. SENSITIVITY RANKING CRITERIA ..... 21**

**LIST OF FIGURES**

**FIGURE 1. PROJECT VICINITY MAP ..... 1**

**FIGURE 2. PROJECT AERIAL ..... 3**

**FIGURE 3. PROPOSED PROJECT PLAN ..... 4**

**FIGURE 4. PLEISTOCENE LOCALITIES NEAR TO THE PROJECT ..... 8**

**FIGURE 5. VARIATIONS IN GROUND VISIBILITY AROUND THE PROJECT AREA ..... 10**

**FIGURE 6. MODERATE BROWN SANDY SOILS WERE PRESENT AT THE SURFACE. .... 10**

## **SUMMARY OF FINDINGS**

The purpose of this study is to assess the potential for impacting paleontological resources resulting from construction of the proposed 2300 Redondo Avenue Project, City of Long Beach, Los Angeles County, California. The proposed 2300 Redondo Avenue Project involves the construction of three buildings encompassing 427,548 square feet of warehouse/ distribution/ logistics uses with supporting office facilities and 638 parking spaces on a 19.09-acre site within the City of Long Beach. Project excavations are planned to be 5 feet with localized impacts to 8 feet deep.

The project is mapped as late to middle Pleistocene non-marine and nearshore marine deposits, also locally called the Palos Verdes Sand.

Results of the record search indicate that no previous fossil localities have been recorded within the project boundaries. Ninety-nine localities with almost 1000 fossil specimens were identified within 5 miles of the proposed project area. Seventeen localities were identified from undifferentiated Quaternary deposits which contained fossil vertebrates and another two with 570 specimens of marine invertebrates. From the Palos Verdes Sand, seventy-six localities producing 380 fossil specimens were identified near to the project.

Almost all of the project area (~95%) was hardscaped and where the ground was visible only the surface could be seen. Ground visibility ranged from poor (40%) in landscaped areas to excellent (90%). No cuts, culverts, or erosional surfaces were present to view the sediments below the modern soil however. No fossils were observed during the survey.

Both the late to middle Pleistocene non-marine and nearshore marine deposits / Palos Verdes Sand are ranked as moderate but patchy sensitivity (PFYC 3a).

The project is paleontologically sensitive for all excavations more than five feet in depth. At present, based on planned depths of impact, it is considered unlikely that fossils meeting significance criteria will be encountered, therefore, no mitigation is recommended. If unanticipated discoveries of paleontological resources occur during construction, all work within 50 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist. Should fossils be found, a paleontology mitigation plan may be needed along with monitoring.

# INTRODUCTION

## PURPOSE OF STUDY

The purpose of this study is to assess the potential for impacting paleontological resources resulting from construction of the proposed 2300 Redondo Avenue Project, City of Long Beach, Los Angeles County, California (Figures 1, 2).



Figure 1. Project Vicinity Map

## **PROJECT LOCATION AND DESCRIPTION**

The proposed 2300 Redondo Avenue Project (project) is located entirely within the City of Long Beach, bordered by Redondo Avenue to the West, a California National Guard Facility to the South, a residential neighborhood to the East, and Burnett Street to the North (Figure 2).

The proposed 2300 Redondo Avenue Project involves the construction of three buildings encompassing 427,548 square feet of warehouse/distribution/logistics uses with supporting office facilities and 638 parking spaces on a 19.09-acre site within the City of Long Beach (Figure 3).

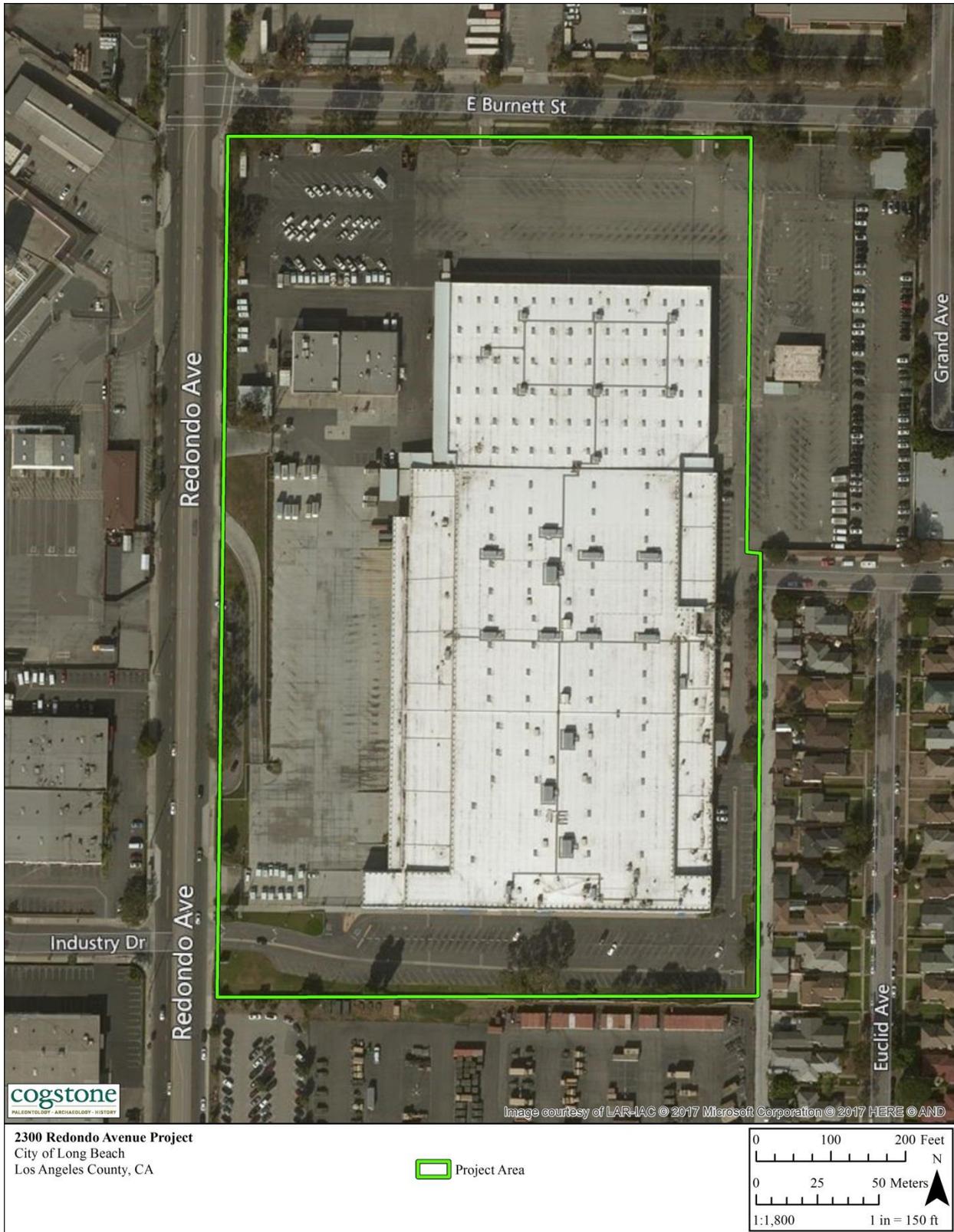
## **PROJECT STUDY AREA**

The project is located on the U.S. Geological Survey (USGS) Long Beach 7.5-minute topographic quadrangle map within Section 28 of Township 4 South, Range 12 West. The majority of the excavations are planned to be a maximum of 5 feet below surface with localized impacts to 8 feet deep.

## **PROJECT PERSONNEL**

Cogstone conducted the paleontological resources studies and a brief resume of the principal investigator is appended (Appendix A). Additional qualifications of key Cogstone staff are available at <http://www.cogstone.com/key-staff/>

- Kim Scott served as the Principal Paleontologist for the project and wrote this report. Scott has a M. S. in Biology with an emphasis in paleontology from California State University, San Bernardino, a B.S. in Geology with an emphasis in paleontology from the University of California, Los Angeles, and over 20 years of experience in California paleontology and geology.
- John Harris, Paleontology Practice Leader and Principal Investigator reviewed the report. He has a Ph.D. in Geology from the University of Bristol (U.K.), an M.A. in Geology from the University of Texas, Austin, a B.S. (Hons) in Geology from the University of Leicester (U.K.). Dr. Harris has over 40 years of field and research experience in North America and Africa.
- Megan Wilson performed the record search, a joint archaeological and paleontological field evaluation, and prepared the report maps. Wilson has a M.A. in Anthropology from California State University Fullerton, a GIS certification, and over nine years of experience in California archaeology and paleontology.



**Figure 2. Project Aerial**

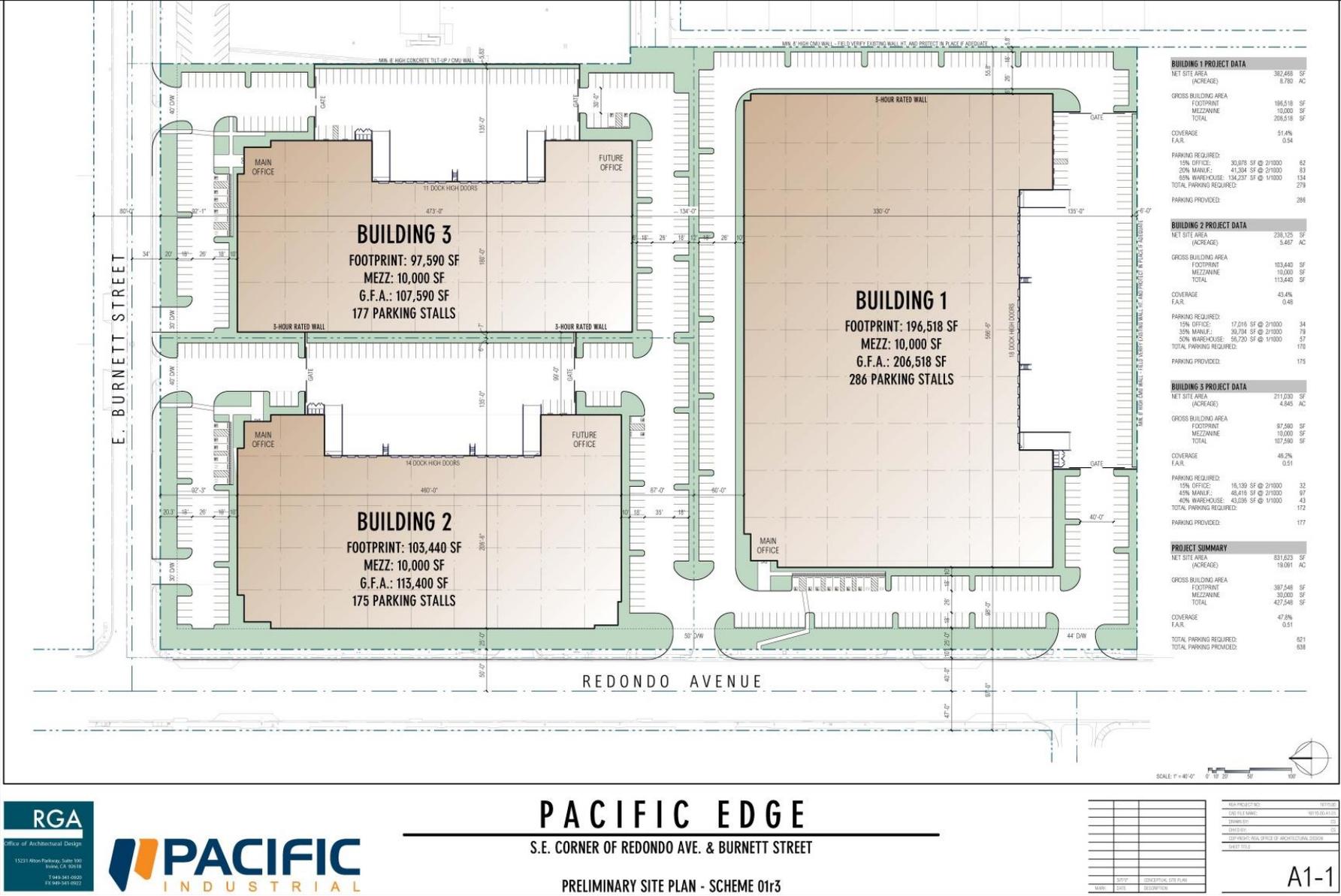


Figure 3. Proposed Project Plan

## **REGULATORY ENVIRONMENT**

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

### **PUBLIC RESOURCES CODE**

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

### **CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307**

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

## **BACKGROUND**

### **GEOLOGICAL SETTING**

The project lies at the western edge of the broad coastal plain of Los Angeles and Orange Counties, California named the Tustin Plain. The Tustin Plain is bounded by the Santa Ana Mountains to the east, the Puente and Coyote Hills to the north, and the San Joaquin Hills to the south. Los Angeles and Orange Counties are part of the coastal section of the Peninsular Range Geomorphic Province, which is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Faults branching off from the San Andreas Fault to the east create the local mountains and hills. The Peninsular Ranges Geomorphic Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east (Wagner, 2002).

### **PROJECT GEOLOGY**

The project is mapped as late to middle Pleistocene (11,700 to 500,000 years old) interfingering nearshore marine to non-marine deposits (Saucedo et al. 2016). Beach, estuarine, and reddish-brown alluvial deposits of clays to sands and conglomerates are now frequently present as wave cut platforms brought to the surface by uplift (Saucedo et al. 2016).

These sediments can also be locally called the Palos Verdes Sand when it is entirely near shore marine (McLeod 2017). Woodring et al. (1946) mapped the late to middle Pleistocene Palos Verdes Sand just under the sediments that Saucedo et al. (2016) label as late to middle Pleistocene old marine to non-marine deposits. However, Poland and Piper (1956) included the Palos Verdes Sand in with the deposits that Saucedo et al. (2016) label as late to middle Pleistocene old marine to non-marine deposits.

The Palos Verdes Sand consists of near shore marine sands to pebbles with some silts and clays. These sediments locally occur on the first marine terrace and can range from a few inches to 15 feet thick around the Palos Verdes Peninsula. On Reservation Point near the southwestern end of the Terminal Island, the Palos Verdes Sand was measured to be between 2 and 5 feet thick, while in San Pedro the deposits range from 2.25 feet to 7.75 feet. These sediments are exposed at the surface typically underlying non-marine terrace deposits and overlying the San Pedro Formation (Woodring et al. 1946).

## **RECORDS SEARCH**

Cogstone requested a records search from the Natural History Museum of Los Angeles County, Department of Vertebrate Paleontology that covered the project area as well as a 1 mile radius (McLeod 2017a; Appendix B). In addition, online and print resources were reviewed (LACMIP 2017; PBDB 2017; UCMP 2017; Miller 1971; Jefferson 1991a, 1991b; McLeod 2017b). Results of the record search indicate that no previous fossil localities have been recorded within the project boundaries. Ninety-nine localities with almost 1000 fossil specimens were identified within 5 miles of the proposed project area (Appendix C).

### **UNDIFFERENTIATED QUATERNARY LOCALITIES**

Terrestrial mammal fossils documented from the Quaternary (Holocene and Pleistocene) deposits are most likely from the late Pleistocene alluvium. Seventeen localities containing fossil vertebrates and another two with 570 specimens of marine invertebrates were identified. Extinct terrestrial mammals include mammoths, bison, camels, tapir, and horse. Sea lion, whale, bird, eagle rays, and bony fish were also recovered from these deposits (Miller 1971; Jefferson 1991a, 1991b; McLeod 2017a, 2017b; UCMP 2017). The rest of the fossils consisted of marine bivalves, snails, scaphopods, bryozoans, and echinoderms. Of particular note is that McLeod (2017b) indicated that some fossils of extinct animals were present as shallow as 5 feet below the surface (Figure 4; Appendix C).

### **PALOS VERDES SAND**

The Palos Verdes Sand equivalent with the late to middle Pleistocene old marine to non-marine deposits mapped within the proposed project. Seventy-six localities producing 380 fossil specimens were identified near to the project (Jefferson 1991a, 1991b; McLeod 2017a, 2017b; UCMP 2017). Four of these localities contained the remains of fossil vertebrates. Bird, sea otter, whale, and a specimen of the now extinct Law's flightless sea duck were recovered from these deposits. Most of the marine invertebrates recovered from Pleistocene deposits are still living today and included bivalves, snails, scaphopods, decapods, and echinoderms (Appendix C).

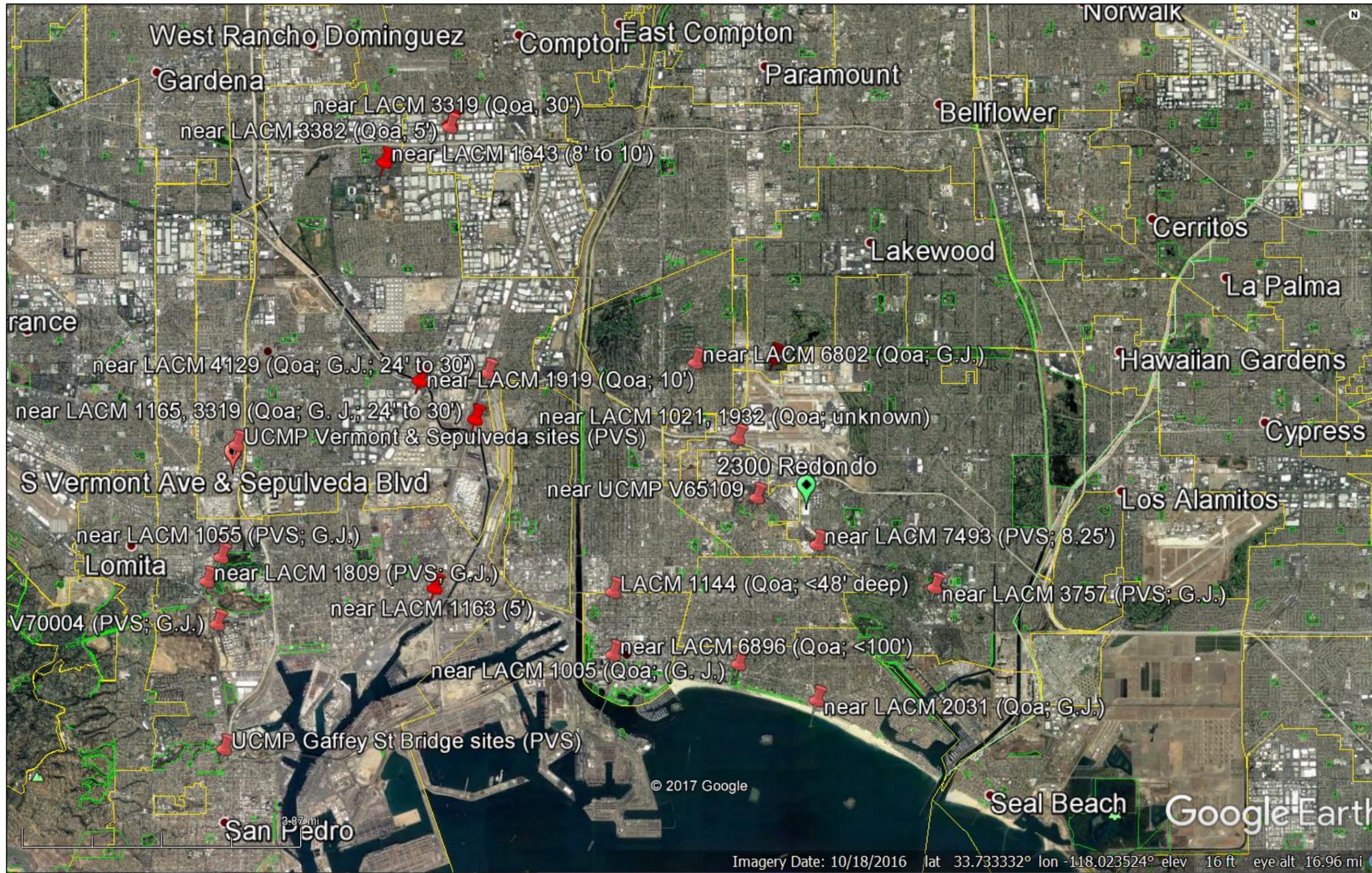


Figure 4. Pleistocene localities near to the project

## **SURVEY**

### **METHODS**

The survey stage is an important part of the project's environmental assessment phase. Its purpose is to confirm that field observations conform to the geological maps of the project area. Sediments are assessed for their potential to contain fossils. Additionally, if there are known paleontological resources the survey will verify the exact location of those resources, the condition or integrity of each resource, and the proximity of the resource to the project area. All undeveloped ground surface areas within the ground disturbance portion of the project area were examined. Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the project area, including ground surface visibility and items of interest, were taken with a digital camera.

Megan Wilson of Cogstone performed a joint archaeological and paleontological field survey of the project area on August 4, 2017.

### **RESULTS**

Almost all of the project area (~95%) was hardscaped and where the ground was visible only the surface could be seen. Ground visibility ranged from poor (40%) in landscaped areas to excellent (90%; Figure 5). Soils were observable around some of the project area (Figure 6). No cuts, culverts, or erosional surfaces were present to view the sediments below the modern soil however. No fossils were observed during the survey.

## **PALEONTOLOGICAL SENSITIVITY**

The Potential Fossil Yield Classification (PFYC) utilizes a multi-level scale for fossiliferous sensitivity (BLM 2008; Appendix D). Knowledge of the geological formations gleaned from geological maps, the survey, and records of previous fossils recovered from the area provide the basis for determining the paleontological sensitivity of the sediments found within the project area. In general, invertebrate localities are less sensitive for fossils than vertebrate localities.

The project is mapped as late to middle Pleistocene non-marine and nearshore marine deposits / Palos Verdes Sand. These sediments are assigned a moderate but patchy sensitivity (PFYC 3a).



**Figure 5. Variations in ground visibility around the project area.**



**Figure 6. Moderate brown sandy soils were present at the surface.**

## **STUDY FINDINGS AND RECOMMENDATIONS**

Numerous fossils of extinct animals are known from the undifferentiated Pleistocene sediments and the Palos Verdes Sand near the planned project. The majority of the excavations are planned to be a maximum of 5 feet below surface with localized impacts to 8 feet deep.

The proposed project is sensitive for fossils at depths of five feet or more. At present, based on planned depths of impact, it is considered unlikely that fossils meeting significance criteria will be encountered, therefore, no mitigation is recommended. If unanticipated discoveries of paleontological resources occur during construction, all work within 50 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist. Should fossils be found, a paleontology mitigation plan may be needed along with monitoring.

## REFERENCES CITED

BLM (Bureau of Land Management)

2008 *Potential Fossil Yield Classification (PFYC) System*. Online at:

[http://www.blm.gov/style/medialib/blm/ut/natural\\_resources/cultural/paleo/Paleontology\\_Documents.Par.97864.File.dat/IM2008-009\\_att1%20-%20PFYC%20System.pdf](http://www.blm.gov/style/medialib/blm/ut/natural_resources/cultural/paleo/Paleontology_Documents.Par.97864.File.dat/IM2008-009_att1%20-%20PFYC%20System.pdf)

Jefferson, G. T.

1991a A Catalogue of late Quaternary Vertebrates from California: Part one, nonmarine lower vertebrate and avian taxa. *Natural History Museum of Los Angeles, Technical Report #5*.

1991b A Catalogue of late Quaternary Vertebrates from California: Part two, Mammals. *Natural History Museum of Los Angeles, Technical Report #7*.

McLeod, S. (Natural History Museum of Los Angeles County)

2017a Vertebrate Paleontology Records Check for paleontological resources for the proposed 2300 Redondo Avenue Project, Cogstone Project # 4139, in the City of Long Beach, Long Beach, Los Angeles County, California, project area. July 21, 2017, 2 pgs. See Appendix B.

2017b Vertebrate Paleontology Records Check for paleontological resources for the proposed MUST Facility Project, Cogstone Project # 3993, in the City of Long Beach, Long Beach, Los Angeles County, California, project area. March 9, 2017, 3 pgs. On file with Cogstone.

PBDB – Paleobiological Database

2017 Online records search of the Paleobiological Database.

Poland, J. F. and A. M. Piper

1956 Ground-water geology of the coastal zone, Long Beach - Santa Ana area, California: U.S. Geological Survey, Water-Supply Paper 1109, scale 1:31,680.

Saucedo, G. J., H. G. Greene, M. P. Kennedy, and S. P. Bezore

2016 Geologic map of the Long Beach 30' x 60' quadrangle, California: California Geological Survey Regional Geologic Map Series Map No. 5, version 2.0; map scale 1:100,000. Online at: [ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim\\_geo\\_pdf/Long\\_Beach\\_100k\\_v2.0\\_Map.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/Long_Beach_100k_v2.0_Map.pdf)

UCMP

2017 Online records search of the University of California, Berkeley paleontology database.

Wagner, D. L.

2002 *California Geologic Survey Note 36*. Online at:

[http://www.conservation.ca.gov/cgs/information/publications/cgs\\_notes/note\\_36/Documents/note\\_36.pdf](http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_36/Documents/note_36.pdf)

Woodring, W. P., M. N. Bramlette, and W. S.W. Kew

1946 Geology and paleontology of Palos Verdes Hills, California: U.S. Geological Survey, Professional Paper 207, scale 1:24,000.

## **APPENDIX A: QUALIFICATIONS**



**KIM SCOTT**

Principal Investigator for Paleontology  
Field & Lab Director for Paleontology

## **EDUCATION**

2013 M.S., Biology with a paleontology emphasis, California State University, San Bernardino  
2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles

## **SUMMARY QUALIFICATIONS**

Scott has more than 20 years of experience in California paleontology. She is a qualified geologist and field paleontologist with extensive survey, monitoring and fossil salvage experience. In addition, she has special skills in fossil preparation (cleaning and stabilization) and preparation of stratigraphic sections and other documentation for fossil localities. Scott serves as company safety officer and is the author of the company safety and paleontology manuals.

## **SELECTED PROJECTS**

**Coto de Caza EIR Subdivision, Coto de Caza, Orange County, CA.** The project proposes the subdivision of an existing large estate for development of 28 new residential lots on approximately 50-57 acres of land. Proposed residential lots will be a minimum of one acre in size. Prepared a Paleontological Assessment Report. Contracted to Bill Lyon. Co-Principal Paleontologist/Report Co-author. 2015.

**Little Corona, Newport Beach, Orange County, CA.** The project is part of the Newport Coast Watershed Management Plan and proposes the diversion of water from Buck Gully Creek into a subsurface infiltration gallery in which the Creek water will be percolated through the sand in order to improve beach conditions. Prepared the Archaeological and Paleontological Assessment Report. Contracted to Michael Baker RBF. Co-Principal Paleontologist/Report Co-author. 2015.

**Center Avenue, Huntington Beach, Orange County, CA.** The project consisted of constructing an underground parking structure. Sub to Avalon Bay. Supervised archaeological and paleontological field work and prepared the Archaeological and Paleontological Monitoring report. Field and Laboratory Director/ Report Co-author. 2014.

**Gene Autry Way, Caltrans District 12, Anaheim, Orange County, CA.** Project consisted of extending Gene Autry Way westward from 2,400 feet east of Interstate 5 to Haster Street (6 lanes wide), widening approximately 1,575 feet of Haster Street (520 feet south of Katella Avenue to 600 feet north of Oranewood Avenue) from 4 to 6 lanes plus a center turn lane, and completion of the Gene Autry Way overpass. Prepared a Paleontological Monitoring Report. Contracted to C. C. Myers. Field and Laboratory Director/Report Co-author. 2011-2012.

**State Route 57 Northbound Widening Project, Caltrans District 12/ Orange County Transportation Authority (OCTA), Fullerton, Orange County, CA.** Caltrans widening to State Route 57 between Lambert and Yorba Linda Avenue. Supervised paleontological monitoring and prepared the Paleontological Monitoring report. Under contract to CC Myers. Field and Laboratory Supervisor/Report Co-author. 2011-2012.

**Interstate 5 and Ortega Highway Interchange, San Juan Capistrano, Orange County, CA.** The project consisted of reconfiguring the interchange. Sub to ECORP Consulting. Co-authored Paleontological Literature Review. Field and Laboratory Director/ Report Co-author. 2006.

**Central Park West Project, Irvine, Orange County, CA.** The project consisted of building a housing development with underground parking. Supervised archaeological and paleontological field work and co-authored the Archaeological and Paleontological Assessment and monitoring reports. Sub to Lennar Communities. Field and Laboratory Director/ Report Co-author. 2005-2010.

## **APPENDIX B. RECORD SEARCH**



Natural History Museum  
of Los Angeles County  
900 Exposition Boulevard  
Los Angeles, CA 90007  
tel 213.763.DINO  
www.nhm.org

Vertebrate Paleontology Section  
Telephone: (213) 763-3325

e-mail: [smcleod@nhm.org](mailto:smcleod@nhm.org)

21 July 2017

Cogstone Resource Management, Inc.  
1518 West Taft Avenue  
Orange, CA 92865-4157

Attn: Megan Wilson, Archaeologist & GIS Technician

re: Vertebrate Paleontology Records Check for paleontological resources for the proposed  
2300 Redondo Avenue Project, Cogstone Project # 4139, in the City of Long  
Beach, Los Angeles County, project area

Dear Megan:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed 2300 Redondo Avenue Project, Cogstone Project # 4139, in the City of Long Beach, Los Angeles County, project area as outlined on the portion of the Long Beach USGS topographic quadrangle map that you sent to me via e-mail on 7 July 2017. We do not have any vertebrate fossil localities that lie within the proposed project area boundaries, but we do have localities nearby from the same sedimentary units that occur in the proposed project area, either at the surface or at depth.

The entire proposed project area has exposures of older Quaternary deposits typically referred to as the Palos Verdes Sand or the Lakewood Formation in this vicinity. Our closest vertebrate fossil locality from these deposits is LACM 7493, just east of south of the proposed project area near the intersection of the Pacific Coast Highway (Highway 1) and Grand Avenue, that produced a fossil specimen of camel, Camelidae, at a depth of 8.5 feet below the surface. Northwest of the proposed project area, near the intersection of Spring Street and Cherry Avenue south of the San Diego Freeway (I-405), our older Quaternary locality LACM 1021 produced fossil specimens of bird, Aves, and mammoth, *Mammuthus*, at unknown depth. Adjacent to locality LACM 1021 but at a greater depth of 37 feet below the surface, our locality LACM 3245

produced a rich suite of fossil invertebrates and fish from the marine older Quaternary San Pedro Sand. The fossil fish fauna from locality LACM 3245, mostly represented by skull otoliths (ear bones) obtained from screen washing sediment samples, was described by J.E. Fitch and R.D. Reimer in 1967 (Bulletin of the Southern California Academy of Sciences, 66(2):77-91). Fitch and Reimer figured fossil specimens in the LACM collections from locality LACM 3245 for the fish *Citharichthys stigmaeus* (speckled sanddab), *Citharichthys sordidus* (Pacific sanddab), *Paralichthys californicus* (California halibut), *Parophrys vetulus* (English sole), *Lyopsetta exilis* (slender sole), *Electrona rissoi* (lanternfish), and *Lepidogobius lepidus* (bay goby).

Any excavations in the older Quaternary deposits exposed in the proposed project area may well uncover significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Sediment samples should also be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,



Samuel A. McLeod, Ph.D.  
Vertebrate Paleontology

enclosure: invoice

## **APPENDIX C. FOSSILS IN THE VICINITY OF THE PROJECT**

Fossils from within 5 miles of the project from undifferentiated Quaternary older alluvial deposits. Extinct animals are noted by †.

Common Name	Taxon	Depth	Age/ dates	Locality	Location	Reference
Columbian mammoth	† <i>Mammuthus</i> sp. cf. <i>M. columbi</i>	unknown	Pleistocene	LACM 1005	Long Beach: Bixby Park	Miller 1971
mammoth	† <i>Mammuthus</i> sp.	unknown	Pleistocene	LACM 1021	Long Beach: near the Spring St and Cherry Ave	Jefferson 1991a, 1991b; McLeod 2017a
bird	Aves					
sea lion	<i>Zalophus</i> sp.	less than 48 feet	Pleistocene	LACM 1144	south of Anaheim St; near Loma Vista Dr and Crystal Court	McLeod 2017b
camel	†Camelidae					
bison	† <i>Bison</i> sp.					
bison	† <i>Bison</i> sp.	5 feet	Pleistocene	LACM 1163	west of SR 103; near Anaheim St and Henry Ford Ave	McLeod 2017b
mammoth	† <i>Mammuthus</i> sp.	30 feet	Pleistocene	LACM 1165	Carson: Alameda St and Sepulveda Blvd	Jefferson 1991b
mammoth	† <i>Mammuthus</i> sp.	8-10 feet	Pleistocene	LACM 1643	Dominguez Hills: near 190th and Annalee Ave.	Jefferson 1991b, McLeod 2017b
mammoth	† <i>Mammuthus</i> sp.	10 feet	Pleistocene	LACM 1919	Dominguez Hills: west of Wilmington Ave., south of 223rd St	McLeod 2017b
mammoth	† <i>Mammuthus</i> sp.	unknown	Pleistocene	LACM 1932	Long Beach: near Spring St and Cherry Ave	Jefferson 1991b, McLeod 2017
tapir	† <i>Tapirus</i> sp.	unknown	Pleistocene	LACM 2031	Long Beach: Belmont Pier	Jefferson 1991b
bison	† <i>Bison</i> sp. sp. cf. <i>B. antiquus</i>					
elephant relative	†Proboscidea	30 feet	Pleistocene	LACM 3319	Long Beach: east of Wilmington Ave north of Artesia Blvd	Jefferson 1991b
bison	† <i>Bison</i> sp.	unknown				
mammoth	† <i>Mammuthus</i> sp.	19 feet	Pleistocene	LACM 3660	Bixby Knolls; south of Carson St; along Cover St between Pixie Ave and Paramount Blvd	McLeod 2017b
camel	†Camelidae	24 feet	Pleistocene	LACM 4129	Carson: Alameda and 223rd Streets	McLeod 2017b
indeterminate vertebrates	Vertebrata	unknown	Pleistocene	LACM 6802	near Bixby Rd between Atlantic Ave and Orange Ave	McLeod 2017b
whale	Cetacea	less than 100 feet	Pleistocene	LACM 6896	near Magnolia Ave and Ocean Blvd	McLeod 2017b
horse	† <i>Equus</i> sp.	unknown	Pleistocene	V65109	Signal Hill	UCMP 2017
bony fish	Osteichthyes	unknown	Pleistocene	A1483	Signal Hill	UCMP 2017
marine invertebrates	570 specimens of marine bivalves, snails, scaphopods, bryozoans, and echinoderms	unknown	Pleistocene	A1483, A3421	Signal Hill	UCMP 2017

Fossils from within 5 miles of the project from the Palos Verdes Sand. Extinct animals are noted by †.

Common Name	Taxon	Depth	Age/ dates	Locality	Location	Reference
Law's flightless sea duck	† <i>Chendytes lawi</i>	unknown	Rancholabrean, substage 5e (130-120 ka BP)	LACM 1055	Harbor City - Bixby Slough	Jefferson 1991a
bird	Aves	unknown	Rancholabrean, substage 5e (130-120 ka BP)	LACM 1809	Harbor City - Gaffey St and Anaheim Ave	Jefferson 1991a
sea otter	<i>Enhydra</i> sp.	unknown	Rancholabrean, substage 5e (130-120 ka BP)	LACM 3757	Long Beach- U.S. Veterans Hospital	Jefferson 1991b
whale	Cetacea	unknown				
camel family	†Camelidae	8.25 feet	Pleistocene	LACM 7493	near Pacific Coast Highway and Grand Ave.	McLeod 2017a
bivalves and snails	32 specimens of marine invertebrates	unknown	Pleistocene	E7393, E7393, E7572, E7604, E7637, E7641, E7661, E700, E7802, E7952, E7068, E8251, E8256, E8411, E8430, E8511, E8512, E8663, E8699, E8778, E8779, E8939, E8959, E8981, E9796	San Pedro - Gaffey St Bridge	UCMP 2017
marine worms, barnacles, decapods, bivalves, snails, scaphopods, echinoderms	302 specimens of marine invertebrates	unknown	Pleistocene	D390, E7994, E8112, E9006, E9214, E9222, E9245, E9284, E9306, E9319, E9332, E9334, E9346, E9357, E9367, E9415, E9418, E9515, E9538, E9540, E9544, E9563, E9564, E9568, E9603, E9608, E9626, E9647, E9650, E9652, E9654, E9655, E9689, E9724, E9730, E9797	San Pedro	
bivalves and snails	48 specimens of marine invertebrates	unknown	Pleistocene	E7876, E7918, E8046, E8074, E8313, E8410, E8429, E8501, E8698, E8761, E8948	Vermont & Sepulveda, San Pedro	

## **APPENDIX D. SENSITIVITY RANKING CRITERIA**

<b>PFYC Description (BLM, 2008)</b>	<b>PFYC Rank</b>
Very Low. The occurrence of significant fossils is non-existent or extremely rare. Includes igneous or metamorphic and Precambrian or older rocks. Assessment or mitigation of paleontological resources is usually unnecessary.	1
Low. Sedimentary geologic units that are not likely to contain vertebrate fossils or scientifically significant nonvertebrate fossils. Includes rock units too young to produce fossils, sediments with significant physical and chemical changes (e.g., diagenetic alteration) and having few to no fossils known. Assessment or mitigation of paleontological resources is not likely to be necessary.	2
Potentially Moderate but Undemonstrated Potential. Units exhibit geologic features and preservational conditions that suggest fossils could be present, but no vertebrate fossils or only common types of plant and invertebrate fossils are known. Surface-disturbing activities may require field assessment to determine appropriate course of action.	3b
Moderate Potential. Units are known to contain vertebrate fossils or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and of low abundance. Common invertebrate or plant fossils may be found. Surface-disturbing activities may require field assessment to determine appropriate course of action.	3a
High. Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrate fossils or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability. If impacts to significant fossils can be anticipated, on-the-ground surveys prior to authorizing the surface disturbing action will usually be necessary. On-site monitoring or spot-checking may be necessary during construction activities.	4
Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils. Vertebrate fossils or scientifically significant invertebrate fossils are known or can reasonably be expected to occur in the impacted area. On-the-ground surveys prior to authorizing any surface disturbing activities will usually be necessary. On-site monitoring may be necessary during construction activities.	5