

## Appendix D

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# Cultural and Paleontological Resources Assessment Report



# **CULTURAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT FOR THE PROLOGIS VERMONT AVENUE AND REDONDO BEACH INDUSTRIAL PROJECT**

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***Cogstone Project Number:*** 4688

***Type of Study:*** Cultural and Paleontological Resources Assessment

***Cultural Sites:*** None within the Project Area

***Fossil Localities:*** None within the Project Area

***USGS 7.5' Topographic Quadrangle:*** Inglewood 7.5'

***Area:*** 16 acres

***Key Words:*** Negative Survey, Cultural and Paleontological Resources Assessment

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## **SUMMARY OF FINDINGS**

This study was conducted to determine the potential impacts to cultural and paleontological resources during the Prologis Vermont Avenue and Redondo Beach Boulevard Industrial Project, City of Los Angeles, California (Project). This report complies with the requirements of the California Environmental Quality Act (CEQA) with the City of Los Angeles acting as the lead agency.

The proposed Project consists of the construction of an industrial center consisting of a 53-foot tall building totaling 340,298-square-feet (including a 25,000-square-foot mezzanine). The Project includes a total of 223 automobile parking spaces, 32 bicycle parking spaces, 36 dock high truck loading positions, and up to 71 parking stalls for truck trailers.

The Project is mapped entirely as late Pleistocene to Holocene young alluvium (unit 2) which was deposited between 126,000 years ago and through into historic times. The paleontological record search revealed no fossil localities from within the project or within a two-mile radius. Fossil localities are known from terrestrial deposits near to the Project. Extinct late Pleistocene animal fossils of ground sloth, dire wolf, mammoth, horse, two types of pronghorn antelope, and bison have been recovered from within ten-miles of the study area.

A search for cultural resources records of the Project Area and a one-mile radius was completed at the South Central Coastal Information Center (SCCIC) at the University of California, Fullerton on November 25, 2019. Results of the records search indicated that 29 cultural resources investigations have been completed previously within a one-mile radius of the Project Area, with six cultural resources located within one-mile of the Project Area. These include one prehistoric archaeological site and five historical archaeological resources. None of the previous investigations or finds are within the 16-acre Project Area.

In addition to the SCCIC records search, a variety of sources were consulted in December 2019 to obtain information regarding the cultural context of the Project Area. Sources included the National Register of Historic Places, the California Register of Historic Resources, California Historical Resources Inventory, California Historical Landmarks, and California Points of Historical Interest.

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on November 21, 2019. On December 11, 2019, the NAHC responded that a search of the SLF was completed with negative results.

An intensive archaeological and paleontological resources survey of the entire 16-acre Project Area was completed on December 5, 2019. No archaeological or paleontological resources were observed.

The paleontological records search revealed that all of the fossils previously recovered within a 10-mile radius were a minimum of eight feet deep in deposits mapped as late Pleistocene at the surface. Sediments with a Holocene component such as those of the study area produced fossils starting at 11 feet deep. As such the Project sediments less than 10 feet below the modern surface are assigned a low potential for fossils (PFYC 2) and deeper deposits are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. Drilling or pile driving activities regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context. If unanticipated fossil discoveries are made, all work must halt within 50 feet until a qualified paleontologist can evaluate the find. Work may resume immediately outside of the 50 foot radius.

Based on the results of the pedestrian survey and the cultural records search, the Project Area has low sensitivity for prehistoric cultural resources. Analysis of these data sources and historical United States Geological Survey (USGS) aerial photographs indicates that the Project Area also has low sensitivity for buried historical archaeological features such as foundations or trash pits. No further work is recommended.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. 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.

## INTRODUCTION

### PURPOSE OF STUDY

This study was conducted to determine the potential impacts to cultural and paleontological resources during the Prologis Vermont Avenue and Redondo Beach Boulevard Industrial Project (Project), City of Los Angeles, California (Figures 1 -3). This report complies with the requirements of the California Environmental Quality Act (CEQA) with the City of Los Angeles acting as the lead agency.

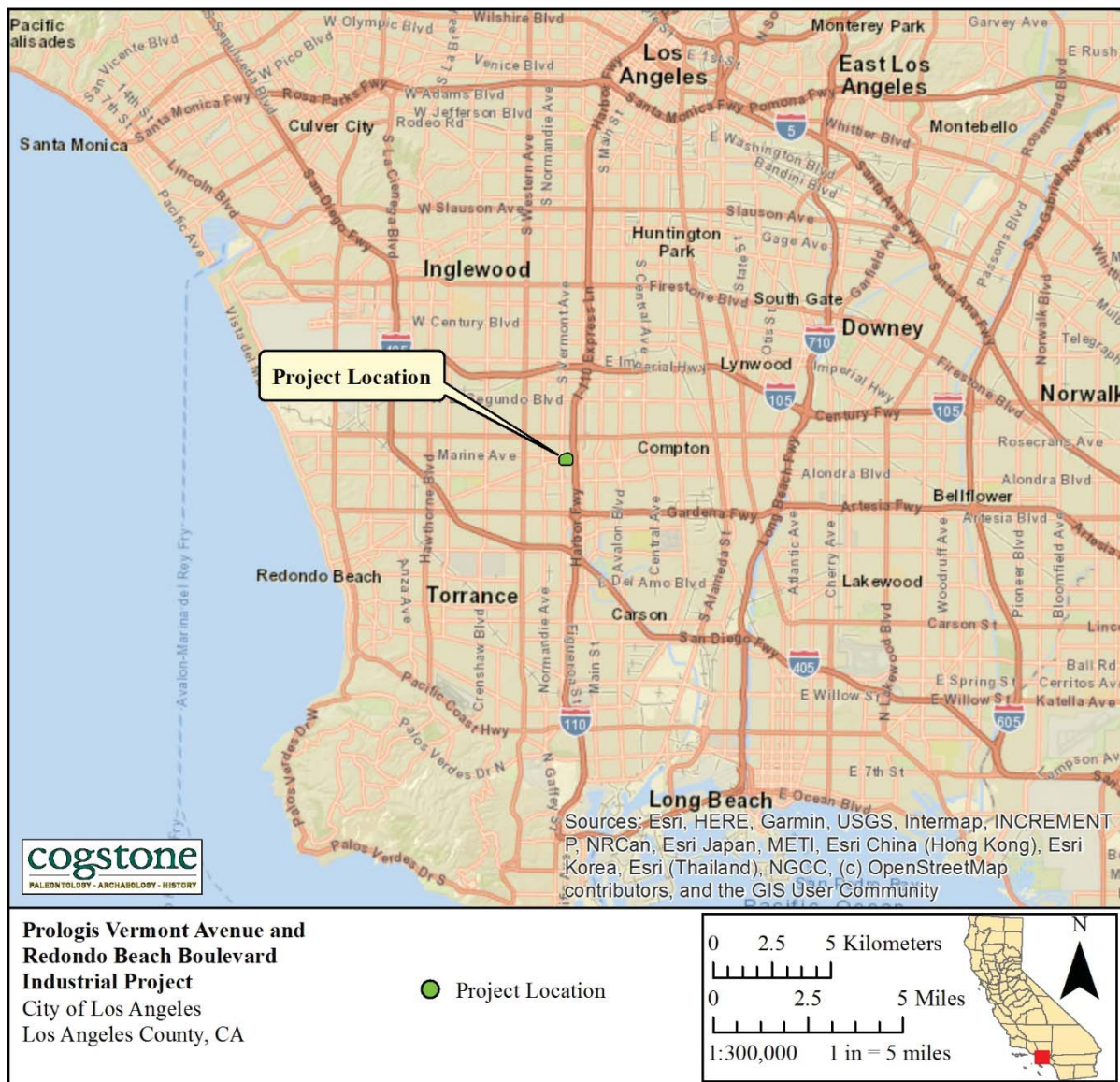


Figure 1. Project vicinity map

## **PROJECT DESCRIPTION AND LOCATION**

The Project is located within Township 3 South, Range 13 West, Section 19 of the San Bernardino Base and Meridian and on the United States Geological Survey (USGS) 7.5-minute Inglewood topographic map (Figure 2). It is a 16-acre vacant site located at 15116-15216 South Vermont Avenue and 747-761 West Redondo Beach in the Harbor Gateway Community Plan Area of the City of Los Angeles, Los Angeles County, California (Figure 3).

The Project will consist of the construction of an industrial center consisting of a 53-foot tall one-story building totaling 340,298-square-feet (including a 25,000-square-foot mezzanine). The Project includes a total of 223 automobile parking spaces, 32 bicycle parking spaces, 36 dock high truck loading positions, and up to 71 parking stalls for truck trailers. All loading and unloading would be located within a fully-screened yard at the rear (north side) the proposed building, adjacent to the railroad right-of-way to the north and out of sight from public sidewalks. The railroad would separate the proposed building from the north of the site, which currently consists of baseball fields and residential units. Loading and unloading activities would occur behind a 14-foot sound wall along the northern property line and onsite parking lot.

Demolition of the numerous existing structures, which are remnants of previous buildings, will be required in order to facilitate construction of the new building. Demolition of these structures and associated improvements would include all foundations, floor slabs, utilities, and any other subsurface improvements that will not remain in place for use by the new development. The building will be located in the south-central area of the site with loading docks along the northern building wall. The building will be surrounded by asphaltic concrete pavements for parking and drive lanes and Portland cement concrete pavements for the loading dock area. Several landscape planters and concrete flatwork will be included throughout the Project.

The Project would include 68,244 square feet of native landscaping and planting 166 trees. The proposed Project will also provide outdoor seating areas, including tables for eating, along and around pedestrian pathways throughout the site and within the landscaped area in the northwest portion of the site. A pedestrian pathway would be provided along the southern portion of the proposed building, adjacent to automobile parking spaces to provide safe pedestrian access across the Project Area.

Most of the excavation will be for general building construction of maximum depth of 8 feet below existing grade. Utility excavation could be as deep as 18 feet below existing grade.

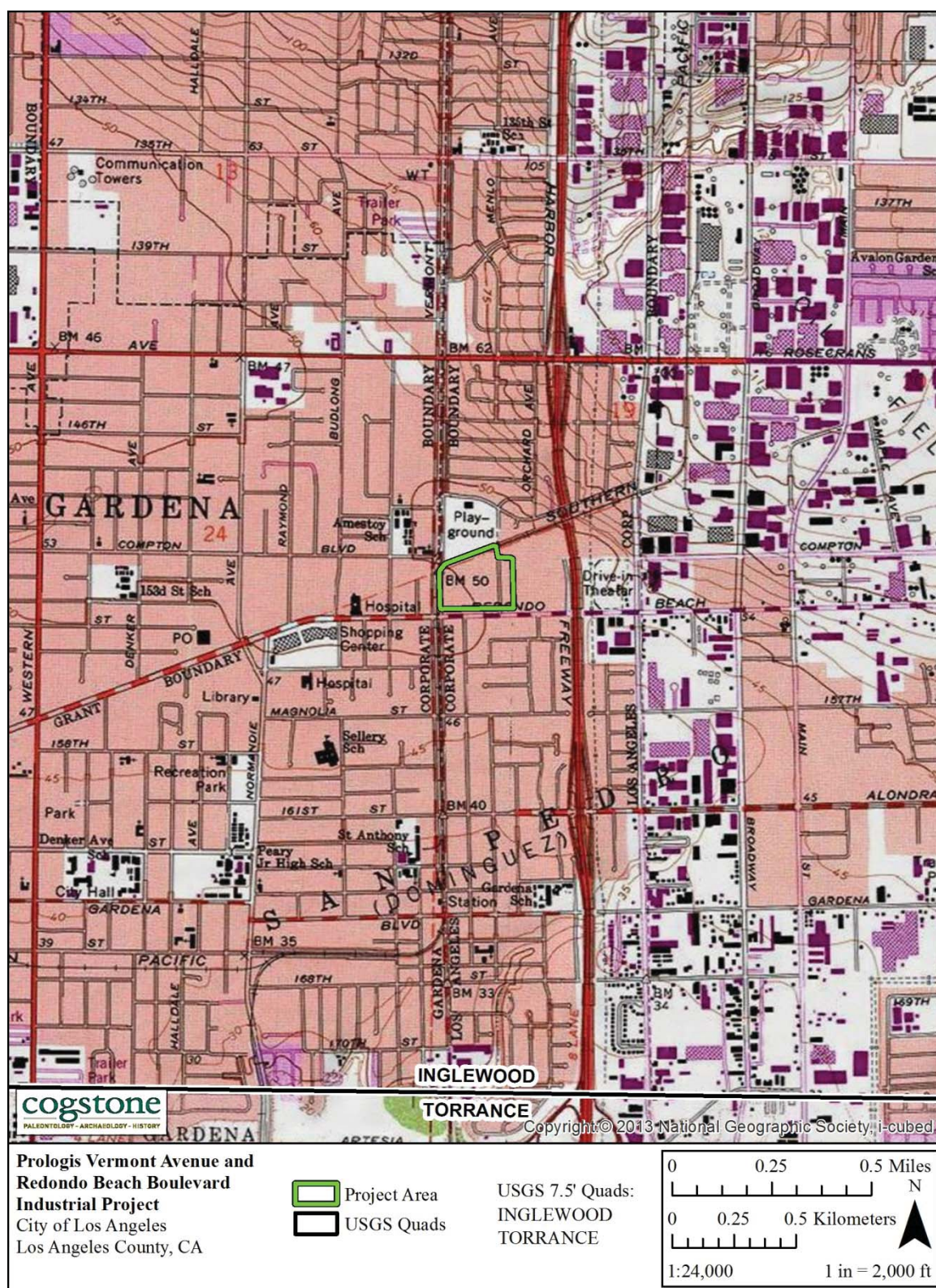


Figure 2. Project location



**Figure 3. Project Area**

## **PROJECT PERSONNEL**

Cogstone Resource Management, Inc. (Cogstone) conducted the cultural and paleontological resources study. Resumes of key personnel are provided in Appendix A.

- Molly Valasik served as the Principal Investigator for Archaeology for the Project and reviewed this report. Ms. Valasik has an M.A. in Anthropology from Kent State University in Ohio and over 10 years of experience in southern California archaeology.
- Desireé Martinez served as the Task Manager for this Project. Ms. Martinez has an M.A. in Anthropology (Archaeology) from Harvard University, Cambridge and has over 22 years of experience in southern California archaeology.
- Kim Scott served as the Principal Investigator for Paleontology for the Project and wrote the geological and paleontological portions of this report. Ms. Scott has an M.S. in Biology with paleontology emphasis from California State University, San Bernardino and has over 24 years of experience in California paleontology and geology.
- Sandy Duarte conducted the record search, field survey, and authored portions of this report. Ms. Duarte holds a B.A. in Anthropology, University of California, Santa Barbara, and more than 15 years of experience in southern California archaeology.
- Logan Freeberg conducted the paleontological record search and prepared the maps for the report. Mr. Freeberg holds a B.A. in Anthropology from University of California, Santa Barbara and has more than 15 years of experience in southern California archaeology.

## **REGULATORY ENVIRONMENT**

### **STATE LAWS AND REGULATIONS**

#### **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.

If paleontological resources are identified as being within the proposed project study area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

#### **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” (Public 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 California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks number No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic registers or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register, is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

- 1) It is 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) It is associated with the lives of persons important to local, California, or national history;
- 3) It 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; or
- 4) It 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.

### **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.”

### **DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES**

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003, Scott et al. 2004).

## **BACKGROUND**

The geologic, paleontological, and environmental sections below provides information on the environmental factors that affect archaeological and paleontological resources, while the prehistoric and historical settings provide information on the history of land use in the general Project region.

### **GEOLOGIC SETTING**

The Project lies within the Los Angeles Basin; a sedimentary basin which includes the coastal plains of Los Angeles and Orange counties and out to Catalina Island, California. This region is bounded by the Santa Ana Mountains to the east, the Santa Monica Mountains to the north, and the San Joaquin Hills to the south. The marine Los Angeles Basin began to develop in the early Miocene, about 23 million years ago. Through time the basin transitioned to terrestrial deposition by the middle Pleistocene, about 1 million years ago.

The area is part of the coastal section of the northernmost Peninsular Range Geomorphic Province and is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Subparallel 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).

The Project is mapped entirely as middle to late Pleistocene older alluvium which was deposited between 2.65 million and 126,000 years ago. These fluvial deposits consist of layered poorly sorted, moderately well-indurated, slightly dissected, gravels to clays. These sediments were deposited by streams and rivers on canyon floors and in the flat flood plains of the area (Saucedo et al. 2016).

These fluvial deposits consist of layered poorly sorted, moderately well-indurated, slightly dissected, gravels to clays (Saucedo et al. 2016). Geotechnical studies described these sediments as, silty sands to medium sands as well as grey, dark green, and reddish to yellowish brown clay deposits.

## PALEONTOLOGICAL SETTING

During the past 100,000 years or so, southern California's climate has shifted from the cooler and damper conditions of the last glacial period to the warmer and dryer conditions of the Holocene interglacial. While continental ice sheets covered the interior of northern North America, southern California was ice free.

Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and Torrey pine (*Pinus* sp. cf. *P. torreyana*) to grew in the Wilshire District of Los Angeles. Monterey cypress also grew in Costa Mesa. Today the most restricted conifers (Monterey cypress and Torrey pine), only inhabit locations on the coasts with cool, moist summers characterized by abundant sea fog. These locations experience a mean summer high temperature of 70°F - 83°F (21.1°C - 28.3°C). Winters are cool and damp with average precipitation of 10.59" - 32.41" (26.90cm - 82.32cm). Cold water upwellings due to submarine canyons adjacent to the shore near the relict populations create these conditions (Intellicast 2014, the Weather Channel 2014).

## ENVIRONMENTAL SETTING

Located in Los Angeles County, the Project is situated approximately 10 miles south southwest of downtown Los Angeles. The Los Angeles River lays 9 miles to the east, Compton Creek is 2.5 miles to the east, and the Pacific Ocean is 7 miles to the west.

Today's Mediterranean-like climate is characterized by warm, dry summers and cool, moist winters, with rainfall predominantly falling between November and May. Mild breezes reach the area from the Pacific Ocean, located west of the Project location.

Prior to development, the native vegetation of the Project Area consisted of California coastal sage scrub. Characteristic species of the California coastal sage scrub include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis* var. *consanguinea*), California buckwheat (*Eriogonum fasciculatum*), lemonade berry (*Rhus integrifolia*), poison oak (*Toxicodendron diversiloba*), purple sage (*Salvia leucophylla*), and black sage (*Salvia mellifera*; Ornduff et al. 2003). Additional common species include brittlebush (*Encelia californica*), chamise (*Adenostoma fasciculatum*), white sage (*Salvia apiana*), Our Lord's candle (*Hesperoyucca whipplei*), and prickly pear cactus (*Opuntia*; Hall 2007).

Large native land mammals of the region included mule deer (*Odocoileus hemionus*), bighorn sheep (<sup>1</sup>‡*Ovis canadensis*), tule elk (‡*Cervus canadensis nannodes*), pronghorn (‡*Antilocapra americana*), bison (‡*Bison bison*), bobcat (‡*Lynx rufus*), mountain lion (‡*Felis concolor*), jaguar (‡*Panthera onca*), coyote (*Canis latrans*), grey wolf (‡*Canis lupus*), black and grizzly bears (‡*Ursus americana*, ‡*Ursus arctos*; California Department of Fish and Game 2016). Smaller native fauna included rabbits (‡*Lepus californicus*, *Sylvilagus audubonii*, ‡*Sylvilagus bachmani*), desert tortoise (‡*Gopherus agassizii*), and numerous other species.

Today, after approximately a century of urban and suburban development, the vegetation of the area is instead typified by imported species. Grasses such as slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), and giant reed (*Arundo donax*); shrubs and trees including blackwood acacia (*Acacia melanoxylon*), saltcedar (*Tamarix ramosissima*), eucalyptus (*Eucalyptus* spp.), and Brazilian pepper (*Schinus terebinthifolius*) are common (Cal-IPC 2006). In recent history, urban development has driven most animals from the area, although mule deer, bobcat, and coyotes still occur in the surrounding hills.

## PREHISTORIC CHRONOLOGY

The latest cultural revisions for the Project Area define traits for time phases of the Topanga pattern of the Encinitas Tradition applicable to coastal Los Angeles and Orange counties (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. Cultural Patterns and Phases**

Phase	Dates BP	Material Culture	Other Traits
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, faunal remains rare	Shellfish and 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	Shellfish important, addition of acorns, reburial of long bones only, addition of flexed inhumations (some beneath metate cairns), cremations rare
Topanga III	3,500 to 1,300	Abundant but decreasing manos and metates, increasing use of mortars and pestles, wider variety of small projectile points, stone-lined ovens	Hunting and gathering important, flexed inhumations (some under rock cairns), cremations rare, possible subsistence focus on yucca/agave

<sup>1</sup> ‡ - indicates that the species has been extirpated from Southern California.

Phase	Dates BP	Material Culture	Other Traits
Angeles IV	1,000 to 800	Cottonwood arrow points for arrows appear, <i>Olivella</i> cupped beads and <i>Mytilus</i> shell disks appear, some imported pottery appears, possible appearance of ceramic pipes	Changes in settlement pattern to fewer but larger permanent villages, flexed primary inhumations, cremations uncommon
Angeles V	800 to 450	Artifact abundance and size increases, steatite trade from islands increases, larger and more elaborate effigies	Development of mainland dialect of Gabrielino, settlement in open grasslands, exploitation of marine resources declined and use of small seeds increased, flexed primary inhumations, cremations uncommon
Angeles VI	450 to 150	Addition of locally made pottery, metal needle-drilled <i>Olivella</i> beads, addition of Euroamerican material culture (glass beads and metal tools)	Use of domesticated animals, flexed primary inhumations continue, some cremations

Topanga Pattern groups were relatively small and highly mobile. Sites known are temporary campsites, not villages and 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 were 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. Secondary inhumation under cairns was the common mortuary practice (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 (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-line earthen ovens. Cooking features such as these were possibly used to bake yucca or agave. Both flexed and extended burials are known (Sutton and Gardner 2010:17).

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 (Sutton 2010).

The Angeles IV phase is marked by new material items including Cottonwood points for arrows, *Olivella* cupped beads, *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. 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. Many Gabrielino inhumations contained grave goods while cremations did not (Sutton 2010).

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the post-contact period (i.e., after A.D. 1542; Sutton 2010). One of the first changes in Gabrielino culture 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 Euro-American tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euro-American material culture increased through time until it constituted the vast majority of materials used. Locally produced brown ware pottery appears along with metal needle-drilled *Olivella* disk beads.

The ethnographic mainland Gabrielino 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. Ethnographically, the mainland Gabrielino practiced interment and some cremation.

## PREHISTORIC SETTING

Approaches to prehistoric frameworks have changed over the past half century from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about 7 to 3 thousand years before the present as the “Millingstone Horizon” (Wallace 1955). Later, the “Millingstone Horizon” was redefined as a cultural tradition named the Encinitas Tradition (Warren 1968) with various regional expressions including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations, some continued to use “Millingstone Horizon” and some used middle Holocene (the time period) to indicate this observed pattern (Sutton and Gardner 2010:1-2).

Recently, it was recognized that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time. These factors are critical to understanding adaptation and change (Sutton and Gardner 2010:1-2).

The Encinitas Tradition characteristics are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points with subsistence focusing on collecting (plants, shellfish, etc.; Sutton and Gardner 2010:7). Faunal remains vary by location but include shellfish, land animals, marine mammals, and fish.

The Encinitas Tradition is currently redefined as comprising four geographical patterns (Sutton and Gardner 2010: 8-25). These are (1) Topanga in coastal Los Angeles and Orange counties, (2) La Jolla in coastal San Diego County, (3) Greven Knoll in inland San Bernardino, Riverside, Orange, and Los Angeles counties, and (4) Pauma in inland San Diego County.

About 3,500 years before present the Encinitas Tradition was replaced in the greater Los Angeles Basin by the Del Rey Tradition (Sutton 2010). This tradition has been generally assigned to the Intermediate and Late Prehistoric periods. The changes that initiated the beginning of the Intermediate Period include new settlement patterns, economic foci, and artifact types that coincided with the arrival of a biologically distinctive population. The Intermediate and Late Prehistoric periods have not been well-defined. Many archaeologists have proposed, however, that the beginning of the Intermediate marked the arrival of Takic-speaking groups (from the Mojave Desert, southern Sierra Nevada, and San Joaquin Valley) and that the Late Prehistoric Period reflected Shoshonean groups (from the Great Basin). Related cultural and biological changes occurred on the southern Channel Islands about 300 years later.

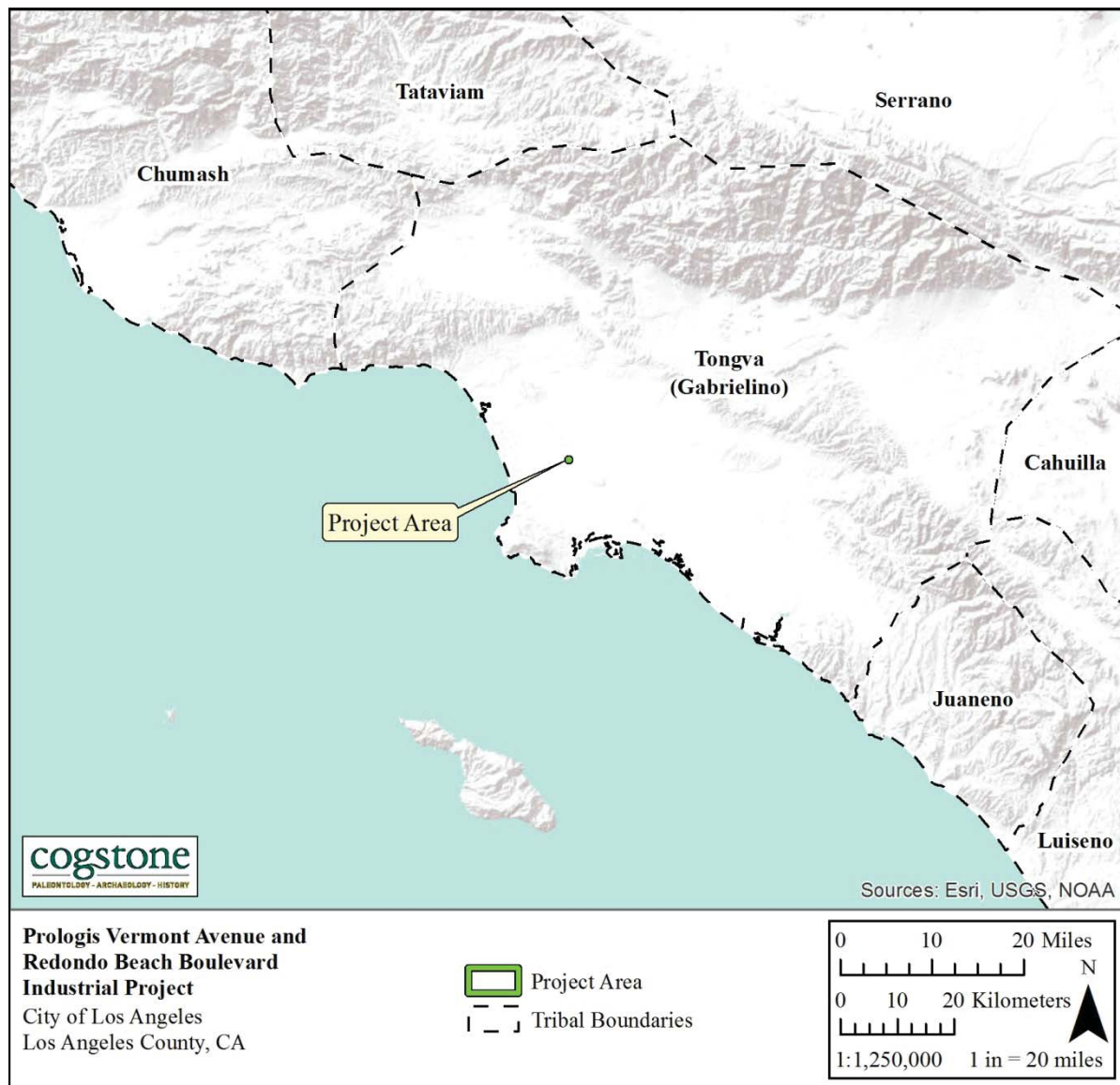
As defined by Sutton (2010), the Del Rey Tradition replaces usage of the Intermediate and Late Prehistoric designations for both the southern California mainland and the southern Channel Islands. Within the Del Rey Tradition are two regional patterns named Angeles and Island. The Del Rey Tradition represents the arrival, divergence, and development of the Gabrielino in southern California.

## **ETHNOGRAPHY**

Early Native American peoples of the Project Area are poorly understood. They were replaced about 1,000 years ago by the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. The Gabrielino speak a language that is part of the Takic language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles (Bean and Smith 1978;

McCawley 1996; Figure 4). At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people.

In addition to the permanent villages, the Tongva occupied temporary seasonal campsites that were used for a variety of activities such as hunting, fishing, and gathering plant resources (McCawley 1996:25). Hunting was primarily for rabbit and deer, while plant collection included acorns, buckwheat, chia, berries, and fruits. Coastal seasonal camps and camps near bays and estuaries were used to gather shellfish and hunt waterfowl.



**Figure 3. Tribal Boundaries Map**

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

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).

## **HISTORIC SETTING**

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino (Bean and Rawls 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 lessen the wealth and power held by the missions. The Secularization Act was passed in 1833, giving the vast mission lands to the Mexican governor and downgrading the missions' status to that of parish churches. The governor then redistributed the former mission lands, in the form of grants, to private owners. Ranchos in California numbered over 500 by 1846, all but approximately 30 of which resulted

from land grants (Bean and Rawls 1993; Robinson 1948).

California was granted statehood in 1850 and although the United States promised to honor the land grants, the process of defining rancho boundaries and proving legal ownership became time consuming and expensive. Legal debts led to bankruptcies and the rise in prices of beef, hide, and tallow. This combined with flooding and drought was detrimental to the cattle industry. Ranchos were divided up and sold inexpensively (Robinson 1948).

### **HISTORY OF HARBOR GATEWAY, LOS ANGELES**

The Project Area is located in the industrial and residential neighborhood of Harbor Gateway at the border of Los Angeles and Gardena. Originally part of Rancho San Pedro, Harbor Gateway was annexed by the City of Los Angeles in 1908 in order to allow Los Angeles a direct link to its harbor in San Pedro. Due to the close proximity of neighboring cities of Gardena and Torrance, Harbor Gateway residents often held address from these cities and maintained a close affiliation with Gardena or Torrance rather than Los Angeles (Survey LA 2012).

Known as the “shoestring strip,” Harbor Gateway maintained a relatively low population despite its annexation into Los Angeles. A mostly rural area with a few scattered homes, the neighborhood would not see significant population growth until the Second World War. Both industrial and residential buildings were constructed within Harbor Gateway as a result of WWII. In the decades following the end of WWII, many of the new residents who moved to the area consisted of Hispanics, Japanese Americans, and African Americans. Like neighboring Gardena, Harbor Gateway locals were mostly farmers or ran small nurseries.

The area was commonly referred to as the shoestring strip until 1985 when it became Harbor Gateway. This was part of an attempt by the area’s then councilwoman to give residents a sense of pride in their community rather than see themselves as an extension of Gardena or Torrance. However, due to Harbor Gateway’s geography it continues to function as a continuation of surrounding cities rather than an independent neighborhood (Survey LA 2012).

### **HISTORY OF GARDENA**

While technically within the borders of Los Angeles, the Project Area is located immediately east of the City of Gardena. While Harbor Gateway is part of Los Angeles, the Gardena post office (as reflected in the PA’s 90247 postal code) services the Project Area and other parts of Harbor Gateway. Due to the location of the Project Area and federal services provided by Gardena to Harbor Gateway a history of the city is included as follows.

In 1784, in recognition of his years of military service, Spanish soldier Juan Jose Dominquez received thousands of acres of land upon which he established Rancho San Pedro. Part of this

land grant would include what would become Gardena Valley. In 1869, General William Starke Rosecrans purchased 16,000 acres in the Gardena Valley, which he promptly subdivided and sold off. Spencer Roane Thorpe was among the first to purchase property from Rosecrans near 161st and Figueroa Street in the Gardena Valley. Various ranchers and farmers would also purchase land in the valley and by 1887 the settlement of Gardena was born (Gardena Heritage Committee 2006).

It is speculated the name “Gardena” is credited to Thorpe or his daughter after the land’s reputation as a “garden spot;” the valley remained one of the few areas between Los Angeles and the west coast with a reliable source of water (fed by the Dominguez Slough) during the dry seasons. From 1886 and 1887, Gardena underwent a significant population and real-estate boom as a result of the construction of the first railroad in the Gardena Valley which ran from Agricultural Park in Los Angeles to the town site of Rosecrans. Known as the Rosecrans Rapid Transit Railway, the railway was purchased in 1889 by the Redondo Railway Company. The Redondo Railway Company would construct approximately 20-miles of rail between Los Angeles and Redondo which resulted in Gardena’s downtown area moving from Figueroa Street to Vermont Avenue (Gardena Heritage Committee 2006).

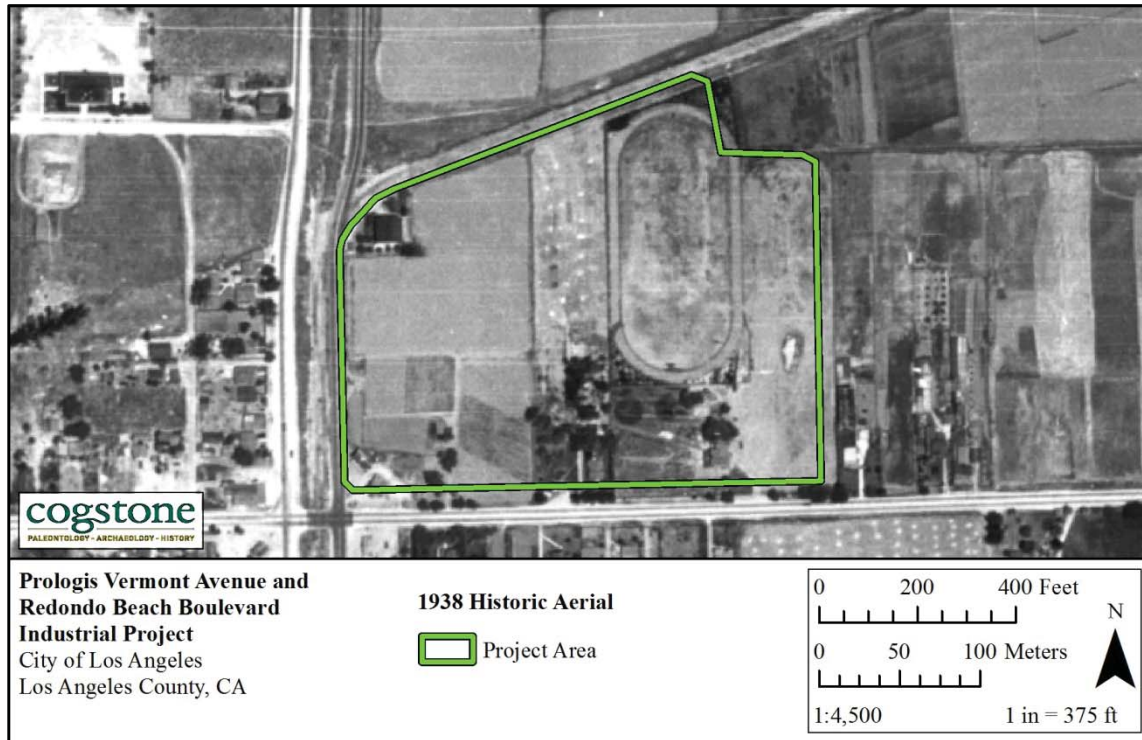
Key to the settlement’s early farming economy, many Japanese immigrants moved to Gardena to work as farmers, nurserymen, and gardeners; prominent crops included strawberries, blackberries, raspberries, tomatoes, alfalfa, and barley. Gardena’s vast berry fields earned the area the title of “Berryland” and the reputation as South California’s berry capital. Following the onset of World War I, Gardena’s berry industry fell into decline as they were replaced with the cultivation of what was considered more vital crops for the war effort. After the war, residential development gradually replaced Gardena’s farmland. In September 1930, Gardena incorporated with the neighboring settlements of Strawberry Park and Moneta to become the City of Gardena. From 1936 to 1980, Gardena operated as the only legalized gambling city in the county. Gardena’s gambling monopoly was so successful it was said there were more poker tables in the city than in the entirety of the United States (Gardena Heritage Committee 2006).

## **PROJECT AREA HISTORY**

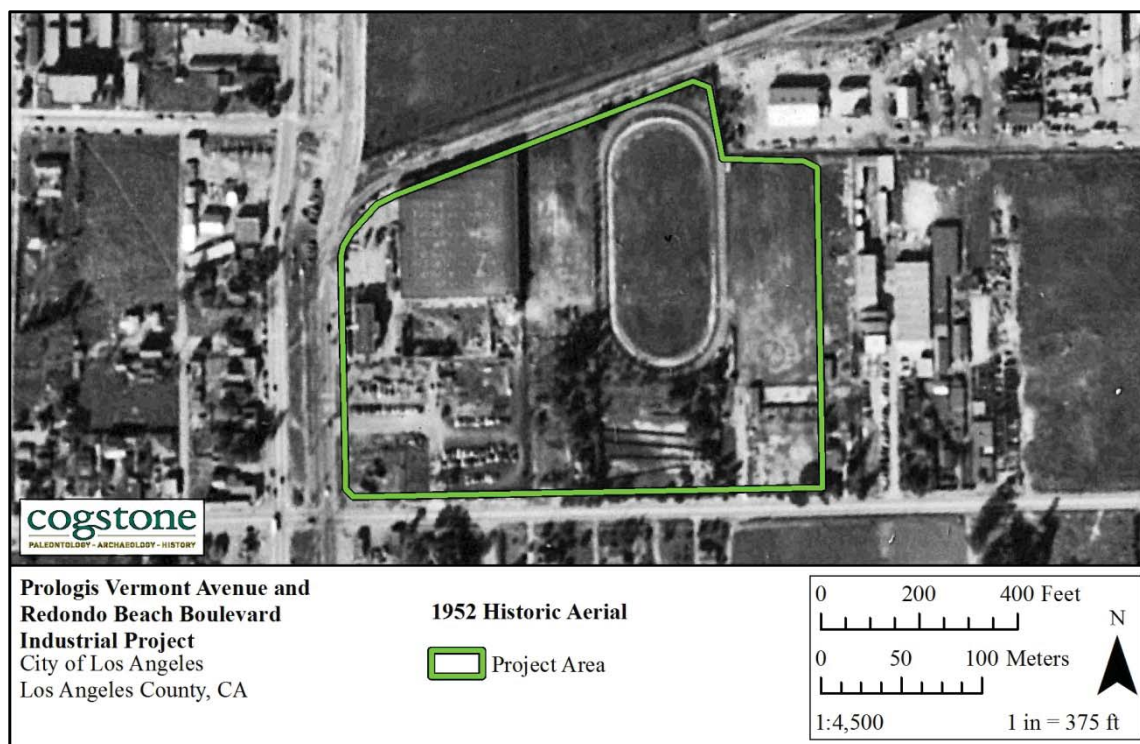
The earliest topographic map for the Project Area is the 1896 Redondo 15-minute topographic map which shows a railway within the Project Area and a pond just to the east. The 1924 Compton 7.5-minute topographic map shows building development at the south end of the Project Area and three ponds to the northeast.

The earliest historic aerial photograph dates to 1938 and shows a residence in the northwest corner of the Project Area, a residence and multiple ancillary buildings in the southwest corner of the Project Area, a large racetrack in the northeastern section of the Project Area, and two additional residences south of the race track. By 1952, both residences at the west side of the

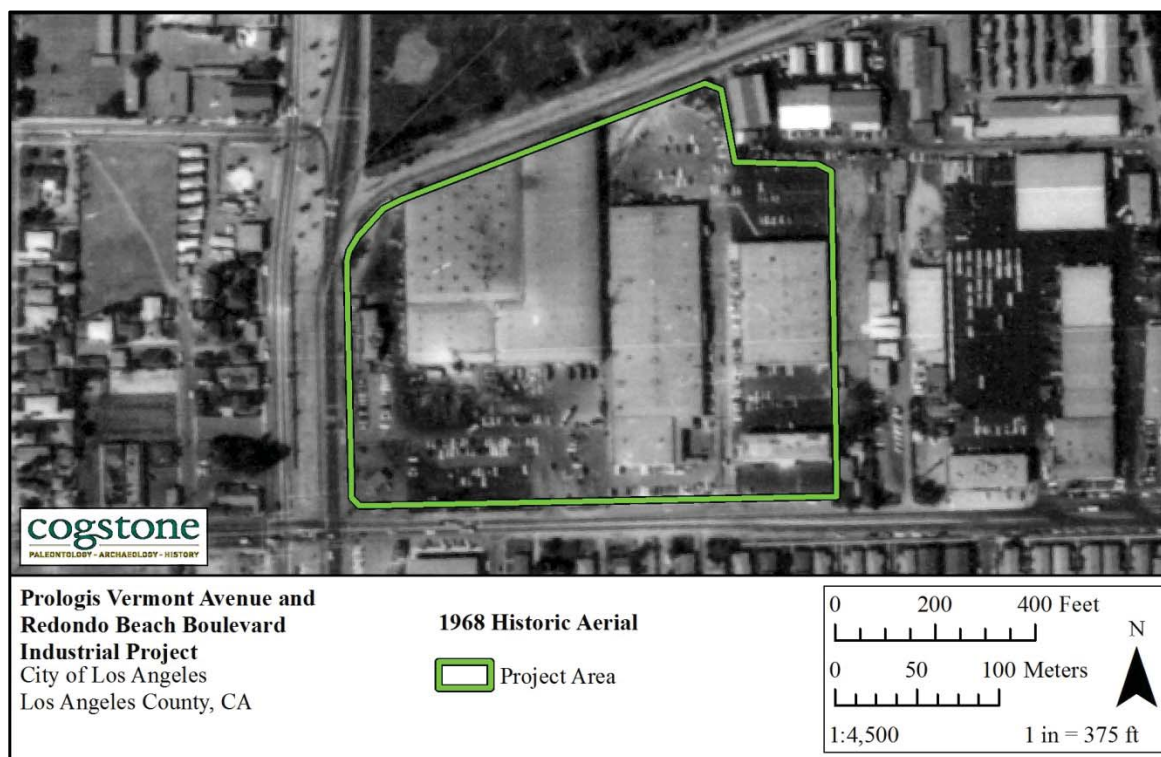
Project Area were demolished; a large light-industrial building and a comparatively smaller building are present in the northwest section of the Project Area with an affiliated parking lot directly south. By 1963, the racetrack and residences to the south of the track were demolished and replaced by a large light-industrial building; furthermore, an L-shaped addition can be seen at the east elevation of the light-industrial building at the northwest of the Project Area. By 1968, two more light-industrial buildings were constructed at the eastern most section of the Project Area. The Project Area appears largely unaltered until approximately 2010 to 2012 when all buildings within the Project Area were demolished.



**Figure 5. 1938 historic aerial of Project Area**



**Figure 6. 1952 historic aerial of Project Area**



**Figure 7. 1968 historic aerial of Project Area**

## RECORDS SEARCHES

### PALEONTOLOGICAL RECORD SEARCH

A record search of the Project was obtained from the Natural History Museum of Los Angeles County (McLeod 2020; Appendix B). Additional records from the University of California Museum of Paleontology database (UCMP 2020), the PaleoBiology Database (PBDB 2020), and print sources were searched for fossil records.

No recorded paleontological localities producing vertebrate fossils were found within 1-mile of the Project Area. Six localities are known from Pleistocene deposits between 1.5 and 3 miles and another 15 localities were found between 3 and 10 miles from the Project. Extinct megafauna from these sites include ground sloth (†*Paramylodon* sp.), mastodon (†*Mammut* sp.) mammoth (†*Mammuthus* sp.), dire wolf (†*Canis dirus*), horse (†*Equus* sp.), two types of pronghorn antelope (†*Capromeryx* sp., †*Breameryx* sp.), camel (†*Camelidae*), and bison (†*Bison* sp.; Table 2). All of the fossils were a minimum of 5 feet deep in deposits mapped as late Pleistocene at the surface, while sediments with a Holocene component produced fossils starting at 11 feet deep.

**Table 2. Fossil localities from near to the Project Area**

Common Name	Taxon	Depth below original surface	Formation mapped at surface	Age/ dates	Locality	Location	Reference
mammoth	† <i>Mammuthus</i> sp.	15 to 20 feet	older alluvium (Qoa)	late Pleistocene	LACM 1344, 3266, 3365	South Los Angeles: near I-110 and Athens on the Hill	McLeod 2019, 2020
squirrel	Sciuridae						
horse	† <i>Equus</i> sp.						
pronghorn	† <i>Breameryx</i> sp.						
western pond turtle	<i>Actinemys</i> sp.	unknown but shallow	older alluvium (Qoa)	late Pleistocene	LACM 1295, 4206	South Los Angeles: near I-110 between 112th and 113th Streets and along Imperial Hwy near Main St	McLeod 2019, 2020
puffin	<i>Mancalla</i> sp.						
turkey	<i>Parapavo</i> sp.						
ground sloth	† <i>Paramylodon</i> sp.						
mammoth	† <i>Mammuthus</i> sp.						
dire wolf	† <i>Canis dirus</i>						
rabbit	<i>Sylvilagus</i> sp.						
squirrel	Sciuridae						
deer mouse	<i>Microtus</i> sp.						
pocket gopher	<i>Thomomys</i> sp.						
horse	† <i>Equus</i> sp.						
elk	‡ <i>Cervus</i> sp.						
diminutive pronghorn	† <i>Capromeryx</i> sp.						
bison	† <i>Bison</i> sp.						
mammoth	† <i>Mammuthus</i> sp.	unknown	older alluvium (Qoa)	Pleistocene	LACM 1021	Long Beach: south of I-405; near the Spring St or Cherry Ave intersection	Jefferson 1991, McLeod 2017a
bird	<i>Aves</i>						
mammoth	† <i>Mammuthus</i> sp.	10 feet	older alluvium (Qoa)	Pleistocene	LACM 1919	Dominguez Hills: west of Wilmington Ave., south of 223rd St	McLeod 2017b
sea lion	<i>Zalophus</i> sp.	less than 48 feet	young alluvium (Qya2) over older marine (Qom)	Pleistocene	LACM 1144	Long Beach: south of Anaheim St; near the Loma Vista Dr or Crystal Court intersection	McLeod 2017b
camel	† <i>Camelidae</i>						
bison	† <i>Bison</i> sp.	5 feet	older alluvium (Qoa)	Pleistocene	LACM 1163	Wilmington: west of SR 103, near the Anaheim St or Henry Ford Ave	McLeod 2017b, 2020
mammoth	† <i>Mammuthus</i> sp.	30 feet	younger alluvium (Qya2)	Pleistocene	LACM 1165	Carson: Alameda St or Sepulveda Blvd	Jefferson 1991

Cultural and Paleontological Resources Assessment for the Prologis Industrial Project

Common Name	Taxon	Depth below original surface	Formation mapped at surface	Age/ dates	Locality	Location	Reference
mammoth	† <i>Mammuthus</i> sp.	unknown	older alluvium (Qoa)	Pleistocene	LACM 1932	Long Beach: near the Spring St or Cherry Ave intersection	Jefferson 1991, McLeod 2017b
hare	<i>Lepus</i> sp.	13-16 feet deep	older alluvium (Qoa)	Pleistocene	LACM 1180, LACM 4942	Los Angeles: Manchester and Airport Blvds	McLeod 2015a, 2000
mastodon	† <i>Mammut</i> sp.						
mammoth	† <i>Mammuthus</i> sp.						
horse	† <i>Equus</i> sp.						
bison	† <i>Bison</i> sp.	30 feet	older alluvium (Qoa)	Pleistocene	LACM 3319	Long Beach: east of Wilmington Ave north of Artesia Blvd	Jefferson 1991, McLeod 2000
elephant relative	† <i>Proboscidea</i>	unknown					
bison	† <i>Bison</i> sp.	5 feet	older alluvium (Qoa)	Pleistocene	LACM 3382	Compton: west of the I-710, east of Wilmington Ave., north of Artesia Blvd.	Jefferson 1991, McLeod 2000
mammoth	† <i>Mammuthus</i> sp.	19 feet	older marine (Qom)	Pleistocene	LACM 3660	Lakewood: south of Carson St; along Cover St between Pixie Ave or Paramount Blvd	McLeod 2017b
camel	† <i>Camelidae</i>	24 feet	younger alluvial fan (Qya)	Pleistocene	LACM 4129	Carson: Alameda or 223rd Streets	McLeod 2017b
indeterminate vertebrates	Vertebrata	unknown	older marine (Qom)	Pleistocene	LACM 6802	Lakewood: near Bixby Rd between Atlantic Ave or Orange Ave	McLeod 2017b
three-spine stickleback	<i>Gasterosteus aculeatus</i>	11 to 34 feet	young alluvium (Qya2)	Holocene or late Pleistocene	LACM 7701, 7702	Bell Gardens: Near the intersection of Atlantic Ave and I-710 north of the Los Angeles River	McLeod 2019
salamander	<i>Batrachoseps</i> sp.						
lizard	<i>Lacertilia</i>						
constrictor snake	<i>Colubridae</i>						
rabbit	<i>Sylvilagus</i> sp.						
pocket mouse	<i>Microtus</i> sp.						
harvest mouse	<i>Reithrodontomys</i> sp.						
pocket gopher	<i>Thomomys</i> sp.						
horse	† <i>Equus</i> sp.	unknown	older alluvium (Qoa)	Pleistocene	UCMP V65109	Long Beach: Signal Hill	UCMP 2020

## CALIFORNIA HISTORIC RESOURCES INFORMATION SYSTEM

Cogstone archaeologist Sandy Duarte conducted a search of the California Historic Resources Information System (CHRIS) located at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on November 25, 2019. The records search included the entire Project Area as well as a one-mile radius. Results of the record search indicate that 29 previous cultural resources studies have been completed within one mile of the proposed Project Area (Table 3).

**Table 3. Previous Studies within One Mile of the Project Area**

<b>Report Num LA-</b>	<b>Authors</b>	<b>Title</b>	<b>Year</b>	<b>Distance from Project Area</b>
LA-00114	Clellow, William C. Jr.	Evaluation of the Archaeological Resources and Potential Impact of Proposed New Freeway Construction on the Harbor Freeway (Route 11) And	1974	0.25-0.5
LA-03583	Bucknam, Bonnie M.	The Los Angeles Basin and Vicinity: A Gazetteer and Compilation of Archaeological Site Information	1974	0.5-1
LA-04512	Eggers, A.V.	Cultural Resources Inventory of the City of Carson, California	1977	0.5-1
LA-05195	Duke, Curt	Cultural Resource Assessment: Cingular Wireless Facility #SM 065-03	2001	0.25-0.5
LA-05331	Romani, John F.	Archaeological Survey Report for the 07-LA-110 Harbor Freeway Transitway Corridor Project	1982	0.5-1
LA-06017	Duke, Curt	Cultural Resource Assessment AT & T Wireless Services Facility No. 05190a Los Angeles County, California	2002	0.25-0.5
LA-06027	Duke, Curt	Cultural Resource Assessment AT & T Wireless Services Facility No. 05189a Los Angeles County, California	2002	0.5-1
LA-06036	Duke, Curt	Cultural Resource Assessment AT & T Wireless Services Facility No. 05051a Los Angeles County, California	2002	0.25-1
LA-06229	Duke, Curt	Cultural Resource Assessment AT & T Wireless Services Facility No. 05054a Los Angeles County, California	2002	0.5-1
LA-07401	Bonner, Wayne H.	Cultural Resource Records Search and Site Visit Results for Cingular Wireless Facility Candidate SM-365-03 (C & H West) 1611 West Rosecrans Avenue, Gardena, Los Angeles County, California	2004	0.5-1
LA-07416	Billat, Lorna	Jarvis/CA-8280b 606 W. 140th Street, Los Angeles, CA, Los Angeles County	2004	0.5-1
LA-07688	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for Cingular Wireless Candidate Lsanca0101 (Berendo & 161st Street) 16125 Ainsworth Street, Gardena, Los Angeles County, California	2006	0.5-1
LA-07689	Bonner, Wayne H.	Cultural Resources Records Search Results and Site Visit for Sprint Candidate La70XC303F (Gardena Ice Co.) 16526 South Normandie Avenue, Gardena, Los Angeles County, California	2005	0.5-1

<b>Report Num LA-</b>	<b>Authors</b>	<b>Title</b>	<b>Year</b>	<b>Distance from Project Area</b>
LA-07868	Wlodarski, Robert J.	Record Search and Field Reconnaissance Phase for the Proposed Royal Street Communications Wireless Telecommunications Site La0505a (SCE Brighton Substation), Located at 1925 West Rosecrans Avenue, Gardena, Los Angeles County, California 90249	2006	0.5-1
LA-08770	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate La13155d (AAW Door), 13900 South Broadway, Los Angeles, Los Angeles County, California	2007	0.5-1
LA-08780	Supernowicz, Dana E.	Cultural Resources Study of the Gardena Department Store Project Sprint-Nextel Site No. La70xc303g, 1106 W. Gardena Boulevard, Gardena, Los Angeles County, California 90247	2007	0.5-1
LA-09225	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for Sprint Nextel Candidate LA60XR341D (Vincent Bell Memorial Park), 17408 South Halldale Avenue, Gardena, Los Angeles County, California	2007	0.5-1
LA-09511	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33308A (Redondo Associates), 1251 West Redondo Beach Blvd., Gardena, Los Angeles County, California	2008	0.25-0.5
LA-09512	Bonner, Wayne H. and Kathleen Crawford	Direct APE Historic Architectural Assessment for T-Mobile USA Candidate LA33308A (Redondo Associates), 1251 West Redondo Beach Blvd., Gardena, Los Angeles County, California	2008	0.25-0.5
LA-10318	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33689B (Sea Rock Inn), 14032 South Vermont Avenue, Gardena, Los Angeles County, California	2009	0.5-1
LA-10563	Slawson, Dana N.	Historical Resources Impact Assessment: Lankershim Boulevard Billboards Project	2000	0.5-1
LA-10567	Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt	Identification and Evaluation of Historic Properties - West Basin Municipal Water District Harbor - South Bay Water Recycling Project Proposed Project Laterals	2005	0.25-1
LA-11097	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for Clearwire Candidate CA-LOS6529/CA8280, 606 West 140th Street, Gardena, Los Angeles County, California, EBI Job No. 61097197	2010	0.5-1
LA-11150	Maxwell, Pamela	West Basin Municipal Water District Harbor/South Bay Water Recycling Project	2003	0.5-1
LA-11482	Racer, F.H.	Camp Sites in Harbor District - F.H. Racer	1939	0.5-1
LA-11581	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0101-01, USID 25785 (Pacific Bell/Gardena), 16215 South Vermont Avenue, Los Angeles, Los Angeles County, California	2011	0.5-1

<b>Report Num LA-</b>	<b>Authors</b>	<b>Title</b>	<b>Year</b>	<b>Distance from Project Area</b>
LA-11648	Crawford, Kathleen	Direct APE Historic Architectural Assessment for AT&T Mobility, LLC Candidate LA0101-01, USID 25785 (Pacific Bell/Gardena), 16215 South Ainsworth Avenue, Los Angeles, Los Angeles County, California	2011	0.5-1
LA-11948	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA33308A (Redondo Associates) 1251 West Redondo Beach Boulevard, Gardena, Los Angeles County, California	2012	0.25-0.5
LA-12186	Bonner, Wayne and Kathleen Crawford	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02381A (SM065 Lily Jack) 15401 South Figueroa Street, Gardena, Los Angeles County, California	2012	0.25-0.5

The records search also determined there are no previously recorded resources located within the Project Area. However, six other cultural resources are located within one mile of the Project Area. These include one prehistoric archaeological site and five historic built resources (Table 4).

**Table 4. Previously Recorded Cultural Resources within One Mile of the Project Area**

<b>Primary No.</b>	<b>Trinomial</b>	<b>Resource Type</b>	<b>Resource Description</b>	<b>Date Recorded</b>	<b>Distance from Project Area</b>
P-19-000088	CA-LAN-000088	Prehistoric Site	Midden with lithic and shell scatter	1939	0.5-1
P-19-177451		Historic Built Resource	Religious building	1981	0.5-1
P-19-177464		Historic Built Resource	1-3 story commercial building	2007	0.5-1
P-19-188449		Historic Built Resource	1-3 story commercial building	2008	0.25-0.5
P-19-189955		Historic Built Resource	1-3 story commercial building	2011	0.5-1
P-19-190077		Historic Built Resource	1-3 story commercial building	2012	0.25-0.5

## OTHER SOURCES

In addition to the SCCIC records search, a variety of sources were consulted in December 2019 to obtain information regarding the cultural context of the Project Area (Table 5). 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-era maps and aerial photographs, is presented in the Project Area History section.

**Table 5. Additional Sources Consulted**

Source	Results
National Register of Historic Places (NRHP; 1979-2002 & supplements)	Negative
Historic USGS Topographic Maps	The earliest topographic map for the Project Area (PA) is the 1896 Redondo 15' topographic map which shows a railway within the PA and a pond just to the east. The 1924 Compton 7.5' topographic map shows building development at the south end of the PA and 3 ponds to the northeast. The 1950 Inglewood 7.5' topographic map depicts more building development within the PA. The 1957 Long Beach 7.5' topographic map shows the Highway developed to the east of the PA, which would be Highway 110. The 1964 Inglewood 7.5' topographic map shows a road developed adjacent to the PA, possibly south Orchard Avenue. No change in development between 1965 and 1981 according to topographic maps.
Historic US Department of Agriculture Aerial Photographs	The earliest historic aerial photograph dates to 1938 and shows a residence in the northwest corner of the Project PA, a residence and multiple ancillary buildings in the southwest corner of the PA, a large racetrack at the northeastern section of the PA, and two additional residences south of the race track. By 1952, both residences at the west side of the PA were demolished. A large light-industrial building and a comparatively smaller building are present in the northwest section of the PA with an affiliated parking lot directly south. By 1963, the racetrack and residences to the south of the track were demolished and replaced by a large light-industrial building; also, an L-shaped addition can be seen at the east elevation of the light-industrial building at the northwest of the PA. By 1968, two light-industrial buildings were constructed at the eastern most section of the PA. The PA appears largely unaltered until 2010/2012 when all buildings within the PA were demolished.

Source	Results
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
California Points of Historical Interest (CPHI; 1992 to 2014)	Negative
Bureau of Land Management (BLM) General Land Office Records	Positive: see Table 5

A search of the Bureau of Land Management, General Land Office Records indicates that several land patents were obtained for portions of the Project Area beginning March 3, 1851, through the Spanish Mexican Grant (9 Stat. 631), and beginning January 21, 1927 through Indemnity Selections (44 Stat. 1022) by the State of California (Table 6).

**Table 6. BLM Land Patents**

Name	Year	Aliquots T: 3S, R; 13W, S19	Authority
Jose Aquina, Andres Dominguez, Esteban Dominguez, Feliciano Dominguez, Jose Dominguez, Madalina Dominguez, Manuel Dominguez, Maria Dominguez, Maria Jesus Dominguez, Pedro Dominguez	1851	Multiple, Total acres: 43131.59	Spanish Mexican Grant
State of California	1927	NE ¼ NW ¼ S19	Indemnity Selections

## NATIVE AMERICAN CONSULTATION

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on November 21, 2019. On December 11, 2019, the NAHC responded that a search of the SLF was completed with negative results.

## **SURVEY**

### **METHODS**

The survey stage is important 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 resources sensitivity. 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.

For paleontological resources, the purpose is to confirm that field observations conform to the geological maps of the Project Area. Sediments were 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.

For cultural resources, the purpose is to verify the exact location of each identified resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources sensitivity, if any. The surveyor searched 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).

### **RESULTS**

Cogstone archaeologist and cross-trained paleontologist Sandy Duarte surveyed the Project Area on December 5, 2019. Due to the heavily developed Project Area, the pedestrian survey consisted of 10-meter wide transects. Ground visibility within the Project Area was very poor (less than 2 percent) due to hardscaping and landscaping (Figure 8). Where not landscaped, much of the area was covered in dry grass, weeds, passion fruit vines, eucalyptus trees, and California fan palm trees (Figure 9). All exposed areas with alluvial fans had been hardscaped and landscaped. No archaeological or paleontological resources were observed within the Project Area during the survey.



**Figure 8. Project Area southwest corner, view northeast**



**Figure 9. Project Area southeast corner, view northwest**

## **IMPACT ANALYSIS**

### **PALEONTOLOGICAL SENSITIVITY**

A multilevel ranking system was developed by professional resource managers within the Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016; Appendix D) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a Project Area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria

All alluvial deposits may increase or decrease in fossiliferous potential depending on how coarse the sediments are. Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 mm or less in diameter. Moreover, fossil preservation also greatly increases with rapid burial in flood-plains, rivers, lakes, oceans, etc. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. So the sands, silts, and clays of flood-plains, rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

The Project is mapped entirely as middle to late Pleistocene older alluvium. A records search revealed that all of the fossils previously recovered within a 10-mile radius were a minimum of five feet deep in deposits mapped as late Pleistocene at the surface. Sediments with a Holocene component such as those of the study area produced fossils starting at 11 feet deep. As such the project sediments less than five feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. Sediments more than five feet

below the modern surface are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area (Table 7).

**Table 7. Paleontological Sensitivity Rankings**

Rock Unit	PFYC rankings				
	5 very high	4 high	3 moderate	2 low	1 very low
older alluvium, middle to late Pleistocene			more than 5 feet deep	less than 5 feet deep	

## CULTURAL SENSITIVITY

Based on the results of the pedestrian survey and the cultural records search, the Project Area has low sensitivity for prehistoric cultural resources. Analysis of these data sources and historical USDA aerial photographs indicate that the Project Area also has low sensitivity for buried historical archaeological features such as foundations or trash pits. No further work is recommended.

## CONCLUSIONS AND RECOMMENDATIONS

### PALEONTOLOGY

The Project is mapped entirely as middle to late Pleistocene older alluvium. The record search revealed no fossil localities from within the Project or immediate vicinity, however localities are known from the same sediments as found within the study area near to the Project.

The middle to late Pleistocene older alluvium sediments less than five feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. More than five feet below the modern surface these sediments are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area.

Planned vertical impacts for the building are as much as eight feet deep and utilities trenching could be as deep as 18 feet below existing grade. Based on fossils found in similar sediments nearby, paleontological monitoring is recommended for the excavations more than five feet deep

into native sediments. Drilling or pile driving activities regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context. The only instance in which such fossils will meet significance criteria is if the fossil is a species new to the region.

If unanticipated fossil discoveries are made, all work must halt within 50 feet until a qualified paleontologist can evaluate the find. Work may resume immediately outside of the 50 foot radius.

## **CULTURAL**

No cultural resources were identified within the Project Area during the intensive pedestrian survey or during any previous investigations. In addition, the CHRIS and SLF searches conducted in support of the Project indicate that no cultural or tribal resources have been previously recorded within the Project Area. These negative findings along with a review of historic USDA aerial photographs indicate that the potential for subsurface cultural resource deposits is low. No further cultural resources work is recommended for the Project.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. 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.

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## **APPENDIX A. QUALIFICATIONS**

**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 (RPA) with over 10 years of professional and academic archaeological field and research experience. She has conducted technical studies and 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* and is well-versed in the compliance procedures of CEQA and Section 106 of the NHPA and in working with a variety of federal, state, and local agencies throughout California. She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation's Information Centers.

**SELECTED PROJECTS**

**Whittier Boulevard/Three Intersection Improvements, Caltrans District 7, City of Whittier, Los Angeles County, CA.** Cogstone conducted intensive-level cultural resources surveys and prepared technical studies for improvements proposed for three intersections at Colima Road, Santa Fe Springs Road and Painter Avenue in a disturbed urban environment. Managed records search, Sacred Lands search, NAHC consultation, and APE mapping. Sub to Michael Baker. Principal Investigator for Archaeology. 2016-2018

**La Verne General Plan Update, City of La Verne, Los Angeles County, CA.** Cogstone reviewed and summarized available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of La Verne to support an update of the City's General Plan. Cogstone conducted archaeological and paleontological record searches, extensive historical research at City Hall, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC), and a general analysis of impacts of future projects within the city that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to De Novo. Principal Investigator for Archaeology. 2018

**Reseda Skate Facility Project, City of Los Angeles, Los Angeles County, CA.** Cogstone was retained to conduct an archaeological assessment to determine the potential effects to archaeological resources resulting from construction of an ice rink, roller rink, and associated parking lot. Services included a records search, intensive-level pedestrian survey, and archaeological assessment report that determined the potential of disturbance to archaeological resources was low. *This project was a task order from an on-call contract with Los Angeles Bureau of Engineering.* Sub to ICF. Principal Investigator for Archaeology. 2017

**Little Tujunga Canyon Road Bridge Replacement Project, Angeles National Forest, Los Angeles County, CA.** The County of Los Angeles Department of Public Works (LADPW) proposed a bridge replacement over Buck Canyon Creek in order to meet current bridge design and seismic safety standards, and improve the safety for pedestrians, bicyclists, and vehicle users in the project area. The existing bridge was built in 1928, and underwent widening in 1959. Cogstone was retained to complete a cultural resources assessment which included a review of existing literature and historic maps, a record search, and an intensive-level pedestrian survey of the 1.74 acre project area under an Archaeological Resources Protection Act (ARPA) permit. Sub to Michael Baker. Principal Investigator for Archaeology. 2017

**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**

Ms. Scott has more than 20 years of experience in California paleontology. She is a sedimentary geologist and qualified paleontologist with extensive experience. She is a skilled professional who is well-versed in the compliance procedures of CEQA, NEPA, and the Paleontological Resources Preservation Act (PRPA). Ms. Scott regularly prepares reports for paleontological assessments, mitigation and monitoring plans and measures, and monitoring reports for a variety of federal, state, and local agencies throughout California. In addition, she has prepared paleontological 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. Scott serves as company safety officer.

**SELECTED PROJECTS**

**Purple Line Extension (Westside Subway), Metro/FTA, Los Angeles, CA.** Paleontological Field and Lab Director, Report Co-author. 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. 2011-present

**Barren Ridge Transmission Line, Los Angeles Department of Water and Power (LADWP), Saugus to Mojave, Los Angeles and Kern Counties, CA.** Principal Paleontologist. Over 75 miles of LADWP electrical lines were installed Angeles National Forest, BLM and private lands. Supervised paleontological monitoring and lab work and prepared a Paleontological Monitoring Report to CEQA, BLM, and PRPA standards. Sub to Aspen Environmental Group. 2015-present.

**City of La Verne General Plan, Los Angeles County, CA.** Principal Paleontologist. The Project was for an update to the City's General Plan, a 5,446-acre area. Provided a Paleontological and Cultural Assessment Report for the City. Sub to De Novo Planning Group. 2018.

**Interstate 405 Paleontological Resources Mitigation Plan, Los Angeles and Orange Counties, CA.** Principal Paleontologist. Improvements to a 6-miles of Interstate 405 (I-405) between State Route 73 and Interstate 605. Provided a Paleontological Mitigation and Monitoring Plan. Sub to OC 405 Partners. 2018.

**Little Tujunga Canyon Bridge, Angeles National Forest, Los Angeles County, CA.** Principal Paleontologist. The Project was to replace the Little Tujunga Canyon Road Bridge along Little Tujunga Canyon Road. Provided a Paleontological Assessment Report. Sub to Michael Baker International. 2017.

**Park Place Extension Project, City of El Segundo, Los Angeles County, CA.** Principal Paleontologist. The City proposes to extend Park Place from Allied Way to Nash Street with a railroad grade separation to implement a critical Project improving traffic and circulation in the Project Area. Provided a combined Paleontological Identification and Evaluation Report (PIR/PER). Sub to Michael Baker International. 2017.

**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.

## EDUCATION

1999 M.A., Anthropology (Archaeology), Harvard University, Cambridge  
1995 B.A., Anthropology, University of Pennsylvania, Philadelphia

## SUMMARY QUALIFICATIONS

Ms. Martinez is a qualified archaeologist with 22 years of experience in archaeological fieldwork, research, and curation. She has expertise in the planning, implementation, and completion of all phases of archaeological work and has participated in archaeological investigations as a crew member, tribal monitor, and principal researcher. She meets national standards in archaeology set by the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation*, and the standards outlined in Attachment 1 to Caltrans Section 106 Programmatic Agreement with the FHWA. Her experience also includes compliance with CEQA, NEPA, NAGPRA, SB 18 and other cultural resource laws. In addition, Ms. Martinez has vast experience in lab analysis and museum collections management. Ms. Martinez also has extensive experience consulting with Native American leaders and community members in a variety of contexts.

## SELECTED PROJECTS

**Veterans Affairs Long Beach Health Systems (VALBHS), Cultural Resources Services and Native American Monitoring, City of Long Beach, Los Angeles County, CA.** Managed a variety of public works and infrastructure improvements on the VALBHS campus. Services included archaeological surveys, testing, archaeological monitoring, providing and managing Gabrielino (Tongva) Native American monitoring, and compliance reporting. Projects on the campus included an intensive-level archaeological survey utilizing ground penetrating radar and magnetometry to identify subsurface cultural debris, accurately map abandoned utilities, locate a historic trash pit within the Area of Potential Effects (APE). Principal Archaeologist. 2014-2018

**Whittier Boulevard / Three Intersection Improvements, Caltrans District 7, City of Whittier, Los Angeles County, CA.** Cogstone conducted intensive-level cultural resources surveys and prepared technical studies for improvements proposed for three intersections at Colima Road, Santa Fe Springs Road and Painter Avenue in a disturbed urban environment. Managed records search, Sacred Lands search, NAHC consultation, and APE mapping. Sub to Michael Baker. Project Manager. 2015-2017

**Los Angeles Sanitation District On-Call, Los Angeles Department of Public Works (LADPW), Los Angeles, CA.** As part of 10 task orders for this on-call contract, conducted archaeological investigations for Joint Outfall A, Joint Outfall B, and Joint Outfall D, produced technical reports, and provided Worker Environmental Awareness Program (WEAP) training for cultural resources sensitivity of construction forces and on-call support during construction. Principal Investigator. 2015-2017

**High Desert Corridor/ SR-138 Widening Project, Caltrans District 7/LA Metro, Los Angeles and San Bernardino Counties, CA.** This project involved construction of a 63-mile long, east-west freeway/expressway and rail line between SR-14 in Los Angeles County and SR-18 in San Bernardino County (Palmdale, Lancaster, Adelanto, Victorville, Apple Valley). Field services and reporting included an intensive-level pedestrian survey; Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER), ASR, Extended Phase I Testing Report (XPI), Finding of Effect (FOE) and a combined Paleontological Identification and Evaluation Report (PIR/PER). Compliance with Section 106 of the NHPA and CEQA was required. Sub to Parsons. Principal Archaeologist. 2014-2016

**EDUCATION**

2002 B.A., Cultural Anthropology, University of California, Santa Barbara

**SUMMARY QUALIFICATIONS**

Ms. Duarte is an archaeologist and cross-trained in paleontology with over 15 years of experience in paleontological and archaeological monitoring, surveying, and excavation in southern California. Duarte has experience with Native American consultation as required by Section 106 of the National Historic Preservation Act (NHPA) and under Senate Bill 18 for the protection and management of cultural resources. Beginning in 2003, Duarte worked for the U.S. Forest Service in the Biology, Timber, and Geology Department as an archaeologist, including serving as a trained wild-land firefighter to preserve archaeological sites from forest fires. Additional skills include paleontological identification, fossil preparation, artifact identification and preparation, and final report preparation.

**SELECTED PROJECTS**

**Parkside Estates, City of Huntington Beach, Orange County, CA.** The project consisted of an approximately 50-acre development. Services included monitoring during all excavations, identifying and collecting cultural artifacts, and Native American coordination with Juaneño and Gabrielino groups. LSA Associates. March 2016-September 2019

**State Route 74 Improvements, Caltrans District 12, Orange County, CA.** This project consisted of the widening of SR-74 and adding a shoulder lane. Duties included monitoring the installation of ESA fencing along culturally sensitive areas along SR-74 and widening of shoulder lane. LSA Associates. Archaeological Monitor. April-June 2018

**Perris Gateway Commerce Center, City of Perris, San Bernardino County, CA.** The proposed project included the demolition of existing uses at the project site and the construction and operation of a 380,000 square-foot high-cube warehouse to be constructed on 21.63 acres, 0.27 acres of which will be provided for purposes of street dedication, and the remainder of the site to be developed with 205,000 square feet of landscaping, 225 passenger vehicle parking stalls, 98 trailer parking stalls, and two detention basins. Conducted monitoring during all ground disturbing activities. Archaeological Monitor. March 2018

**La Pata Avenue 1.8-mile Gap Closure and Camino del Rio Extension, Orange County Public Works, City of San Juan Capistrano, Orange County, CA.** This project was a massive undertaking of 14.8 million cubic yards of earth material being removed. Duties included identifying and collecting groundstone artifacts in alluvium and identifying and collecting fossils in bedrock. Ms. Duarte also prepared numerous pinniped fossils specimens with zip scribes. LSA Associates. Lead Archaeological Monitor. March 2014 - March 2017

**Planning Area 40 East/East Rough Grading and Pipeline Trenching, Cities of Lake Forest and Irvine, Orange County, CA.** LSA conducted paleontological resources monitoring for the rough grading of PA 40 East/East for the development of a new residential community. Ms. Duarte served as paleontological and archaeological monitor during all earth-disturbing activities on site. LSA Associates. January-April 2016

**On-Call Environmental Mitigation Program, OCTA, Orange County, CA.** This project consisted of 6 open space properties and 11 restoration project areas selected for mitigation of impacts from the Measure M2 freeway program. Prior to any work taking place, each area had to have an environmental assessment to determine the presence of both historic and prehistoric resources. Duties included leading transects using ArcGIS on a smartphone and assisting in identifying and recording artifacts. LSA Associates. Lead Archaeological Monitor. March-June 2014

## **EDUCATION**

2018     Geographic Information Systems (GIS) Certificate, California State University, Fullerton  
2003     B.A., Anthropology, University of California, Santa Barbara

## **SUMMARY QUALIFICATIONS**

Mr. Freeberg has over 15 years of experience in cultural resource management and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

## **SELECTED PROJECTS**

**Laguna Beach Fire Department Fire Breaks, City of Laguna Beach, Orange County, CA.** This project included the areas adjacent to homes and businesses requiring vegetation removals to create new fire breaks. conducted a pedestrian survey of the natural landscape and slopes located along the eastern and western sides of the SR-133 highway, south of El Toro Road to Pacific Coast Highway. Archaeological monitor. 2019

**Prime Deshecha Landfill Expansion, City of San Juan Capistrano, Orange County, CA.** Assisted in the survey, data recovery and lab work for sites. Performed field STP and unit excavations, participated in post processing lab work cataloging recovered artifacts, and created fieldwork maps and report figures. Cultural Resources Analyst. 2018-2019

**Avenida La Pata Extension, District 12, Cities of San Clemente and San Juan Capistrano, Orange County, CA.** This project was initiated to construct a roadway to connect La Pata Avenue to Antonio Parkway San Juan Capistrano running through the Prima Deshecha Landfill. Served as a field technician for the preconstruction archaeological surveying and data recovery for this project, as well as the archaeological and paleontological monitoring of this project. Prepared numerous pinniped specimens with zip scribes. Technician & Monitor. 2014

**Measure M2 Freeway Environmental Mitigation Program, Orange County, CA.** This project consisted of 6 open space properties and 11 restoration project areas selected for the mitigation of impacts from the Measure M2 Freeway Environmental Mitigation Program. Lead Archaeologist. 2014

**Planning Area 5B, City of Irvine, Orange County, CA.** The project intended for the construction of residential housing for the Irvine Company. Performed a preconstruction archaeological survey, archaeological and paleontological monitoring, and prepared final survey report. Archaeologist/Co-Author. 2013

**Southern California Gas (SCG) Line 85 and Line 225 Repair, unincorporated community of Los Angeles County, CA.** SCG was repairing Line 85 and Line 225 pipelines (both 26-inch natural gas transmission lines that run through the Angeles National Forest). Mr. Freeberg was the lead archaeological and paleontological monitor and was in charge of the in-field cultural resource awareness training of all construction crew members working in the area. In addition, he monitored the work of the construction crew. Other duties included videotaping the Old Ridge Route (ORR) before and after construction activities, recording all vehicles that drove on and off the ORR, protecting the National Forest Inn, enforcing the speed limit on the ORR, enforcing the Transportation Plan, and ensuring that no damage was done to the ORR. Lead Archaeological & Paleontological Monitor/WEAP Trainer. 2007-2008, 2012-2013

## **APPENDIX B. PALEONTOLOGICAL RECORD SEARCH**



## **APPENDIX C. SACRED LANDS FILE SEARCH**

## Sacred Lands File & Native American Contacts 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](mailto:nahc@nahc.ca.gov)

*Information Below is Required for a Sacred Lands File Search*

**Project:** Prologis Industrial EIR Project 4688

**County:** Los Angeles

**USGS Quadrangle Name:** Inglewood, Torrance 7.5'

**Township:** 3S      **Range:** 13W      **Section(s):** 19

**Company/Firm/Agency:** Cogstone Resource Management

**Street Address:** 1518 W. Taft Ave.

**City:** Orange      **Zip:** 92865

**Phone:** 714-974-8300

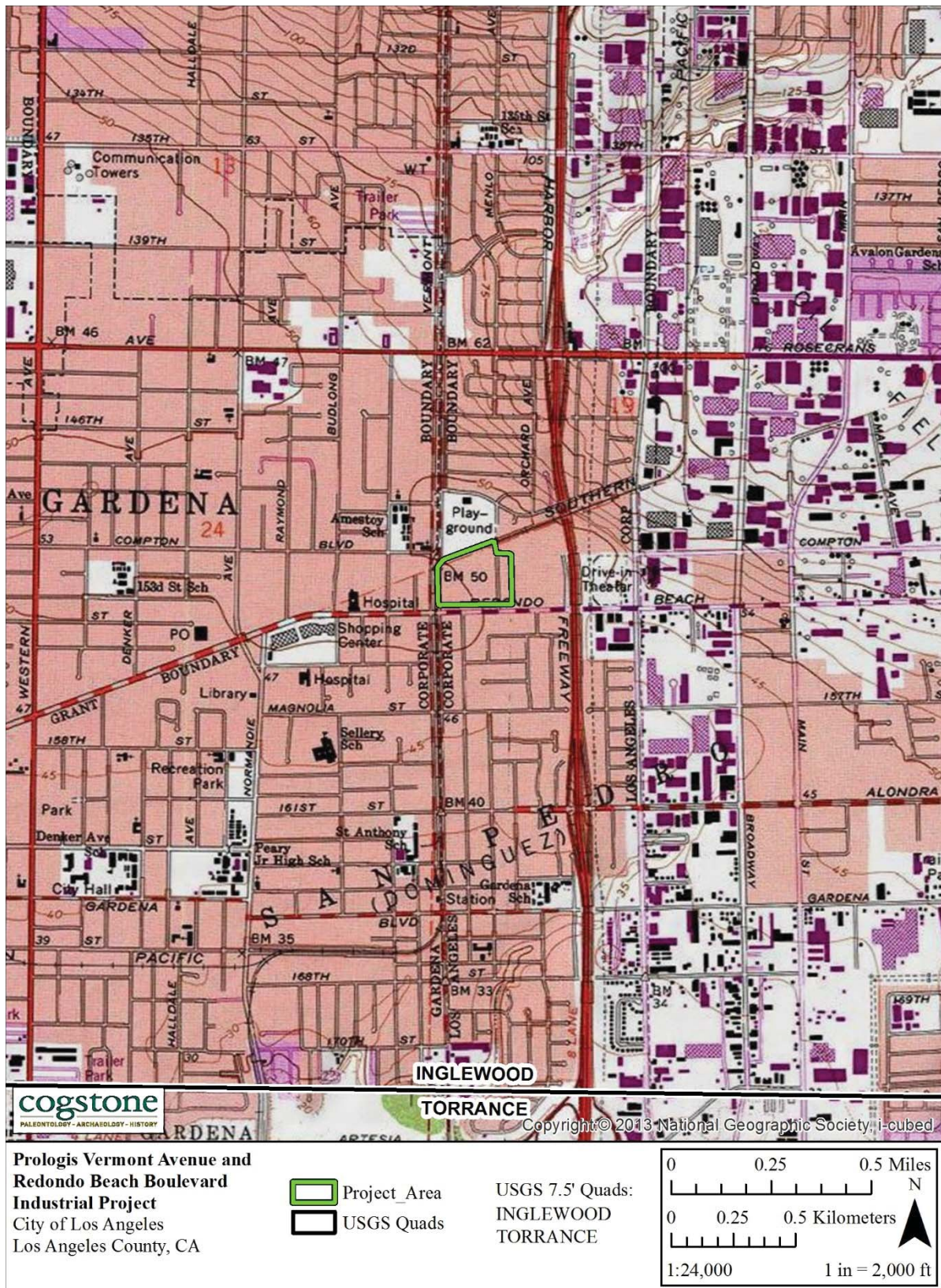
**Fax:** 714-974-8303

**Email:** cogstoneconsult@cogstone.com

### Project Description:

The Proposed Project will consist of the construction of a 341, 402 square foot industrial building located at 15116-15126 South Vermont Avenue and 747-761 West Redondo Beach Boulevard/Harbor Gateway on Assessor's Parcel Numbers (APNs) 6120-002-002, 6120-002-001, and 6120-001-013 in the City of Los Angeles, Los Angeles County, California.

There are no existing structures within the Project area as the previous buildings have already been demolished.



STATE OF CALIFORNIA

GAVIN NEWSOM, Governor

NATIVE AMERICAN HERITAGE COMMISSION  
Cultural and Environmental  
Department 1550 Harbor Blvd., Suite  
100  
West Sacramento, CA 95691  
Phone: (916) 373-3710  
Email: [nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
Website:  
<http://www.nahc.ca.gov>  
Twitter: @CA\_NAHC



December 9, 2019

Sandy Duarte  
Cogstone Resource Management

VIA Email to: [cogstoneconsult@cogstone.com](mailto:cogstoneconsult@cogstone.com)

RE: Prologis Industrial EIR Project, Los Angeles

County Dear Ms. Duarte:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: [steven.quinn@nahc.ca.gov](mailto:steven.quinn@nahc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads 'Steven Quinn'.

Steven Quinn  
Associate Governmental Program

Analyst Attachment

**Native American Heritage Commission  
Native American Contact List  
Orange County  
12/9/2019**

***Gabrieleno Band of Mission  
Indians - Kizh Nation***

Andrew Salas, Chairperson  
P.O. Box 393  
Covina, CA, 91723  
Phone: (626) 926 - 4131  
admin@gabrielenoindians.org

Gabrieleno

***Gabrieleno/Tongva San Gabriel  
Band of Mission Indians***

Anthony Morales, Chairperson  
P.O. Box 693  
San Gabriel, CA, 91778  
Phone: (626) 483 - 3564  
Fax: (626) 286-1262  
GTTribalcouncil@aol.com

Gabrieleno

***Gabrielino /Tongva Nation***

Sandonne Goad, Chairperson  
106 1/2 Judge John Aiso St.,  
#231  
Los Angeles, CA, 90012  
Phone: (951) 807 - 0479  
sgoad@gabrielino-tongva.com

Gabrielino

***Gabrielino Tongva Indians of  
California Tribal Council***

Robert Dorame, Chairperson  
P.O. Box 490  
Bellflower, CA, 90707  
Phone: (562) 761 - 6417  
Fax: (562) 761-6417  
gtongva@gmail.com

Gabrielino

***Gabrielino-Tongva Tribe***

Charles Alvarez,  
23454 Vanowen Street  
West Hills, CA, 91307  
Phone: (310) 403 - 6048  
roadkingcharles@aol.com

Gabrielino

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

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

PFYC Description Summary (BLM 2016)	PFYC Rank
<b>Very Low.</b> The occurrence of significant fossils is non-existent or extremely rare. Includes igneous (excluding air-fall and reworked volcanic ash units), metamorphic, or Precambrian rocks. Assessment or mitigation of paleontological resources is usually unnecessary except in very rare or isolated circumstances that result in the unanticipated presence of fossils.	1
<b>Low.</b> Sedimentary geologic units that are unlikely to contain vertebrate or scientifically significant nonvertebrate fossils. Includes rock units less than 10,000 years old and sediments with significant physical and chemical changes (e.g., diagenetic alteration) which decrease the potential for fossil preservation. Assessment or mitigation of paleontological resources is not likely to be necessary.	2
<b>Moderate.</b> Units are known to contain vertebrate or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and/or of low abundance. Common invertebrate or plant fossils may be found and opportunities may exist for casual collecting. Paleontological mitigation strategies will be based on the nature of the proposed activity.  Management considerations cover a broad range of options that may include record searches, pre-disturbance surveys, monitoring, mitigation, or avoidance. Surface-disturbing activities may require assessment by a qualified paleontologist to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.	3
<b>High.</b> Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrates or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability.  Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.	4
<b>Very High.</b> Highly fossiliferous geologic units that consistently and predictably produce vertebrate 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. Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities.  Paleontological mitigation may be necessary before or during surface disturbing activities. The area should be assessed prior to land tenure adjustments. Pre-work surveys are usually needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.	5
<b>Unknown.</b> An assignment of “Unknown” may indicate the unit or area is poorly studied and field studies are needed to verify the presence or absence of paleontological resources. The unit may exhibit features or preservational conditions that suggest significant fossils could be present, but little information about the actual unit or area is known.  Literature searches or consultation with professional colleagues may allow an unknown unit to be provisionally assigned to another Class, but the geological unit should be formally assigned to a Class after adequate survey and research is performed to make an informed determination.	U
<b>Water or Ice.</b> Typically used only for areas which have been covered thus preventing an examination of the underlying geology.	W, I