

Appendix I

Tribal Cultural Resources Report

Tribal Cultural Resources
Assessment for the
Thatcher Yard Project,
Los Angeles, California

AUGUST 2019

PREPARED FOR

Thatcher Yard Housing LP

PREPARED BY

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Tribal Cultural Resources Assessment for the Thatcher Yard Project, Los Angeles, California

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SWCA Project No. 056902.00
SWCA CRRD Report No. 19-513

August 2019

Keywords: CEQA; tribal cultural sensitivity assessment; CA-LAN-47 (Admiralty Site); Ballona wetlands; City of Los Angeles Department of City Planning; 93,278 square feet (2.14 acres); 3221–3233 South Thatcher Avenue; assessor parcel number (APN) 4229-002-901; Township 2 South, Range 15 West, Section 22; U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle Venice, California.

MANAGEMENT SUMMARY

Purpose and Scope: Thomas Safran & Associates (the Applicant) retained SWCA Environmental Consultants (SWCA) to conduct a tribal cultural resources assessment in support of the proposed Thatcher Yard Project (Project) within the community of Marina del Rey, located in the City of Los Angeles, California. The Applicant proposes to construct a 98-unit affordable housing development that includes several one- and two-story buildings and one level of subterranean parking within a 93,278-square-foot (2.14-acre) lot. The Project requires removal of the existing pavement and excavation for the basement level, estimated to extend 4 feet below the current grade. The following study addresses tribal cultural resources for purposes of compliance with the California Environmental Quality Act (CEQA), specifically Assembly Bill 52 (AB 52), but also including relevant portions of Public Resources Code (PRC) Sections 5024.1, 15064.5, 21074, 21083.2, 21084.1, and 21084.2. The City of Los Angeles Department of City Planning (City Planning) is the Lead Agency under CEQA for the Project. CEQA requires a lead agency to analyze whether a tribal cultural resource is present, supported by substantial evidence, and may be adversely affected by a proposed project. This report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), and archival research used to evaluate the presence or likelihood (i.e., sensitivity) of tribal cultural resources within the Project site and to inform the analysis of potential impacts from excavation in accordance with Appendix G of the CEQA Guidelines.

Dates of Investigation: On July 17, 2019, SWCA conducted a confidential search of the CHRIS records at the South Central Coastal Information Center (SCCIC) on the campus of California State University, Fullerton.

Summary of Findings: The CHRIS records search did not identify any known tribal cultural resources in the Project site. An SLF search returned by the NAHC was positive. Several lines of evidence indicate that the potential exists for unrecorded tribal cultural resources in the form of buried features or artifacts, as well as Native American burials. The likelihood of tribal cultural resource presence within the Project site was mapped as areas of high, moderate, and low sensitivity. The sensitivity assessment considered Native American settlement patterns within the Ballona area, proximity to closest known sites, and historical impacts to the physical setting. The sensitivity for tribal cultural resources is highest along the southernmost portion of the Project site and within naturally occurring alluvial sediments found below deposits of artificial fill, which otherwise characterize large portions of the Project site. The potential for impacts to tribal cultural resources exists only in those places where the proposed Project activities are likely to encounter alluvial sediments. Conversely, where proposed ground disturbances are proposed exclusively within artificial fill, any tribal cultural resources that might be present in the underlying alluvium would remain preserved, and Project-related impacts would be avoided.

Conclusion: The Project proposes to construct a new housing development, which requires removal of all paved surfaces within the Project site and excavation for a basement level. Excavation for the basement level is expected to extend 4 feet below grade within a 32,925-square-foot area (0.76 acre) measuring 458 by 72 feet. The footprint of the basement level includes areas mapped as low, moderate, and high sensitivity for tribal cultural resources. The high and moderate areas are the most likely to contain underlying alluvial sediments in which tribal cultural resources could occur. Excavation within the low sensitivity zone is expected only occur within artificial fill. Within the remainder of the Project site, the pavement removal is only expected to result in disturbances to the near surface, which appears to be primarily characterized by artificial fill.

SWCA recommends implementing Mitigation Measures **MM TCR-1** through **MM TCR-4**, which include presence/absence testing, conducting worker training, and following protocols for the unanticipated

discovery of tribal cultural resources and human remains. With implementation of these mitigation measures, potential impacts to tribal cultural resources would be less than significant.

Disposition of Data: The final report and any subsequent related reports will be submitted to the Applicant, City Planning, and the SCCIC at California State University, Fullerton. Research materials and the report are also on file at the SWCA Pasadena Office.

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INTRODUCTION

Thomas Safran & Associates (the Applicant) retained SWCA Environmental Consultants (SWCA) to conduct a tribal cultural resources assessment in support of the proposed Thatcher Yard Project (Project) within the community of Marina del Rey, located in the City of Los Angeles, California. The Applicant proposes to construct a 98-unit affordable housing development that includes several one- and two-story buildings and one level of subterranean parking within a 93,278-square-foot (2.14-acre) lot. The Project requires removal of the existing pavement and excavation for the basement level, estimated to extend 4 feet below the current grade. The following study addresses tribal cultural resources for purposes of compliance with the California Environmental Quality Act (CEQA), specifically Assembly Bill 52 (AB 52), but also including relevant portions of Public Resources Code (PRC) Sections 5024.1, 15064.5, 21074, 21083.2, 21084.1, and 21084.2. The City of Los Angeles Department of City Planning (City Planning) is the Lead Agency under CEQA for the Project. CEQA requires a lead agency to analyze whether a tribal cultural resource is present, supported by substantial evidence, and may be adversely affected by a proposed project. This report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), and archival research used to evaluate the presence or likelihood (i.e., sensitivity) of tribal cultural resources within the Project site and to inform the analysis of potential impacts from excavation in accordance with Appendix G of the CEQA Guidelines.

SWCA Senior Archaeologist Chris Millington, M.A., Registered Professional Archaeologist (RPA) was the lead author on the report, prepared all figures, and acted as the Principal Investigator. SWCA Staff Archaeologist Rebekka Knierim, M.A., RPA, conducted background research and co-authored the report. SWCA Principal Investigator Heather Gibson, Ph.D., RPA, provided a peer review of the report. All non-confidential figures in the report are included in Appendix A; Appendix B contains confidential report figures; Appendix C contains the SLF results letter. Copies of the report are on file with the Applicant, City Planning, and the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. All background materials are on file with SWCA's office in Pasadena, California.

PROJECT DESCRIPTION

The Project site is in Marina del Rey, a community at the south end of the City of Los Angeles (Figure 1; all figures are in Appendix A). This location is plotted as Section 22, Township 2 South, Range 15 West as depicted on the U.S. Geological Survey (USGS) Venice, California, 7.5-minute topographic quadrangle (Figure 2). The Project site consists of 93,278 square feet (2.14 acres) of lot area at 3221–3233 South Thatcher Avenue, bordered to the north by Princeton Drive, to the south by Harbor Crossing Lane, and to the west by Oxford Avenue (Figure 3). The County of Los Angeles Assessor's Office lists the assessor parcel number (APN) as 4229-002-901.

The Applicant proposes to construct a 98-unit affordable housing development providing 68 residential units for seniors and 30 for families. The senior housing units will be provided in a two to three-story building and the family units will be provided in several one- and two-story buildings. The Project will have a maximum height of 40.5 feet, 82 vehicular parking spaces in one subterranean parking level, and 72 bicycle parking spaces, and will provide 19,951 square feet of open space. The Project site is currently a flat, paved asphalt lot with remnant building foundations bordered to the northwest and west by single-family homes, and to the northeast, east, and south by apartment complexes. The proposed Project will require ground disturbances associated with the removal of extant pavement and excavation for the basement level. Pavement removal is only expected to involve ground disturbances within the near surface, extending between 12 and 18 inches. Excavation for the basement level is expected to extend 4 feet below grade within a 32,925-square-foot area (0.76 acre) measuring 458 by 72 feet (Figure 4–Figure 6).

REGULATORY SETTING

State Regulations

Assembly Bill 52

AB 52 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. Section 4 of AB 52 adds Sections 21074(a) and (b) to the PRC, which address tribal cultural resources and cultural landscapes. Section 21074(a) defines tribal cultural resources as one of the following:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1(a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on tribal cultural resources should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP) and California Historical Landmarks numbered 770 and higher, are automatically included in the California Register of Historical Resources (CRHR). Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC Section 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.

- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR. A site may be considered significant if it displays one or more of the following attributes: chronologically diagnostic, functionally diagnostic, or exotic artifacts; datable materials; definable activity areas; multiple components; faunal or floral remains; archeological or architectural features; notable complexity, size, integrity, time span, or depth; or stratified deposits. Determining the period(s) of occupation at a site provides a context for the types of activities undertaken and may well supply a link with other sites and cultural processes in the region. Further, well-defined temporal parameters can help illuminate processes of culture change and continuity in relation to natural environmental factors and interactions with other cultural groups. Finally, chronological controls might provide a link to regionally important research questions and topics of more general theoretical relevance. As a result, the ability to determine the temporal parameters of a site's occupation is critical for a finding of eligibility under Criterion 4 (information potential). A site that cannot be dated is unlikely to possess the quality of significance required for CRHR eligibility or be considered a unique archaeological resource. The content of an archeological site provides information regarding its cultural affiliations, temporal periods of use, functionality, and other aspects of its occupation history. The range and variability of artifacts present in the site can allow for reconstruction of changes in ethnic affiliation, diet, social structure, economics, technology, industrial change, and other aspects of culture.

Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code (CHSC) Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at California Code of Regulations (CCR) Section 15064.5; PRC Section 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner:
1104 N Mission Road
Los Angeles, CA 90033
323-343-0512 (8 am to 5 pm Monday through Friday) or
323-343-0714 (after hours, Saturday, Sunday, and holidays)
- If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC).
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.
- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

METHODS

California Historical Resources Information System Records Search

On July 17, 2019, SWCA conducted a confidential search of the CHRIS records at the SCCIC on the campus of California State University, Fullerton, to identify previously documented cultural resources within a 0.8-km (0.5-mile) radius of the Project site, as well as any selectively chosen outside the radius to aid in the assessment of tribal cultural resource sensitivity. The SCCIC maintains records of technical studies and previously documented archaeological resources, including those that may be considered tribal cultural resources; it also maintains copies of the Office of Historic Preservation's portion of the Historic Resources Inventory.

Confidential CHRIS results include specific information on the nature and location of sensitive sites, which should not be disclosed to the public or unauthorized persons and are exempt from the Freedom of Information Act. The information included in a confidential CHRIS records search is needed to assess the sensitivity of a location for undocumented tribal cultural resources and to inform the impact analysis. The search included any previously recorded archaeological resources that could be considered tribal cultural resources (i.e., excluding Historic-period resources not affiliated with Native Americans) within the Project site and surrounding 0.8-km (0.5-mile) area.

Archival Research

Concurrent with the confidential CHRIS records search, SWCA also reviewed property-specific historical and ethnographic context research to identify information relevant to the Project site. Research focused on a variety of primary and secondary materials relating to the history and development of the Project site, including historical maps, aerial and ground photographs, ethnographic reports, and other environmental data. Historical maps drawn to scale were georeferenced using ESRI ArcMAP v10.5 to show precise relationships to the Project site. Sources consulted included the following publicly accessible data sources: City of Los Angeles OHR (SurveyLA); City of Los Angeles Department of Building and Safety (building permits); David Rumsey Historical Map Collection; Huntington Library Digital Archives; Library of Congress; Los Angeles Public Library Map Collection; USGS historical topographic maps; University of California, Santa Barbara, Digital Library (aerial photographs); and University of Southern California Digital Library.

SWCA also reviewed technical reports previously prepared for the Project site that are available through public sources. These include geotechnical investigations, subsurface site assessments, geophysical surveys, and other environmental reports, which are referenced herein.

Sensitivity Assessment

In circumstances where a known tribal cultural resource has not been identified, no previous studies have been conducted, and subsurface testing is not feasible because of existing developments, the potential for an unidentified resource to be present (i.e., sensitivity) in the form of a buried site is assessed indirectly. That determination considers past land uses, broadly, and an assessment of whether the setting is capable of containing buried materials (i.e., preservation potential). Lacking any evidence for the presence or absence of a tribal cultural resources below the surface, the resulting sensitivity is by nature qualitative, ranging along a spectrum of increasing probability for encountering such material, designated here as low, moderate, and high. In general, areas with a favorable setting for habitation or temporary use, soil conditions capable of preserving buried material, and little to no disturbances are considered to have a high sensitivity.

Areas lacking these traits are considered to have low sensitivity. Areas with a combination of these traits are considered to have moderate sensitivity.

In assessing the sensitivity for tribal cultural resources, SWCA considers whether the location was favorable for Native American habitation. Indicators of favorable habitability for Native Americans are proximity to natural features (e.g., perennial water source, plant or mineral resource, animal habitat), other known sites, flat topography, and relatively dry conditions. Sensitivity for Native American-affiliated resources also considers Gabrielino ethnographic studies that describe the location of former Native American settlements, foraging and other indigenous land-use behaviors, as well as regional studies of archaeological site distribution.

Preservation potential for tribal cultural resources considers whether the physical setting is capable of containing buried materials and whether any such materials once present have been destroyed, removed, or otherwise not preserved at the location, either because of natural causes (e.g., erosion, flooding) or historical development. The preservation potential relies on an understanding of existing soil conditions and site history. In urban settings, site-specific soil conditions are obtained through geotechnical studies. More generalized information on existing soil conditions for a given location is also assessed on the basis of soil surveys and geologic studies. For areas in which there was intensive historical use that modified the surface and near surface (e.g., from grading or large-scale excavation), or for areas where there is evidence that the preservation potential is poor, there is reduced sensitivity.

ENVIRONMENTAL SETTING

The Project site is in the Los Angeles Basin, a broad, level plain defined by the Pacific Ocean to the west, the Santa Monica Mountains and Puente Hills to the north, and the Santa Ana Mountains and San Joaquin Hills to the south. This extensive alluvial wash basin is filled with Quaternary alluvial sediments deposited as unconsolidated material eroded from the surrounding hills. Several major watercourses drain the Los Angeles Basin, including the Rio Hondo and Los Angeles, San Gabriel, and Santa Ana Rivers. The Project site and vicinity are within a fully urbanized setting on an open aspect plain at an elevation of 5 feet (1.22 m) above mean sea level. The location is 1.3 miles (2.1 km) northwest from the current shoreline of the Pacific Ocean and less than 0.1 mile (150 m) north of an artificially constructed small-craft harbor.

Historical Ecology

The harbor in Marina del Rey was constructed within an extensive wetland (Ballona Wetland) referred to in the late nineteenth and early twentieth centuries by several names including Port Ballona, Ballona Lagoon, and Ballona Lake. Historical records, photographs, and accounts from Gabrielino and early non-Native inhabitants describe what was once an active ecosystem characterized by freshwater marshes, dense vegetation, and permanently saturated soils amid sand bars and dunal deposits.

Prior to 1825, the Los Angeles River discharged into the wetland, along what is now the approximate course of Ballona Creek, rather than the current course emptying into the harbor near San Pedro (Gumprecht 2001:137–143). Now Ballona Creek is a perennial southwest-flowing stream that serves as a major drainage for the Ballona Valley Watershed, fed by water from the Baldwin Hills and Santa Monica Mountains. Since it was channelized with a concrete lining beginning in 1935 (Gumprecht 2001:206) the creek no longer discharges into the Ballona Lagoon and instead flows directly into the ocean.

Using historical maps and other sources, Dark and colleagues (2011) reconstructed features of the wetland as they would have existed in the nineteenth century. In their work, Dark et al. (2011) documented 174 unique wetland features classified into five wetland types (in order of total surface area): alkali meadow, valley freshwater wet meadow, valley freshwater marsh, brackish to salt marsh/tidal marsh, and alkali flat.

In addition to these environments, the authors also note that freshwater seeps and springs and vernal pools were common features. Dark et al.'s (2011) data show the Project site located within an alkali meadow, on the edge of the Historic-period wetland (Figure 7). Through a series of in-depth studies and detailed reports completed by Statistical Research, Inc. (SRI), in association with the Admiralty Site and Playa Vista Project (Altschul et al. 1992; Altschul et al. 2003:77–85; Homburg et al. 2014), SRI's team of researchers have reconstructed the formation of the Ballona wetlands environment through the Holocene, presented in a series of seven frames (Figure 8). Their work demonstrates that up to 8,500 years before present (B.P.) (uncalibrated¹) what is now Marina del Rey was primarily a terrestrial environment. After fluctuations in sea levels and periodic river flooding, the character of a wetland gradually took shape, and conditions began to vary among freshwater, brackish, and saltwater.

Figure 8 (see also Figure B-1 in Appendix B) shows the Project site (upper left corner of each frame) situated within a coastal plain from 7000 to 5000 B.P., being completely inundated by the ocean for 1,000 years before the seawater recedes into a marshy setting from 4000 to 2000 B.P., which gave way to a sand/marsh from 2000 to 1000 BP until converting back to a coastal plain, as it was mapped around 200 B.P. However, it should be noted that because of the nature of the data used to reconstruct the time frames used in Homburg et al.'s (2014) maps (see Figure 8), the older maps are increasingly geographically imprecise and are intended to be approximations of the conditions supported by data from various sources in sediment cores and geomorphological studies. Therefore, the relative position of the Project site within this schema can be taken as an approximation of possible conditions with respect to resource availability for Native Americans and the preservation of archaeological material in different time periods.

The wetland areas would have supported a variety of plant and animal species that were used by through the early historic period by native Gabrielino people. An intensive survey of vegetation in the Ballona region conducted in 1981 identified three habitats and six plant communities that would have existed prehistorically. Altschul et al. (2003:81) note that “pickleweed saltmarsh, mudflat, and saltflat plant communities of the estuary contrast sharply with the freshwater willow and marsh habitat, and the coastal dune and coastal sage plant communities that dominate terrestrial landscapes.” SRI's previously mentioned work revealed a rich variety of faunal remains represented in the assemblages, which are considered representative of those that would have been available near the Project site. These include vertebrate species (mammals, bony fish, reptiles, birds) and invertebrates (gastropods, clams, mussels, oyster, and scallop).

Physical Setting

The site is situated within Quaternary alluvium (Qa)—sediments deposited by water during the geologic period known as the Quaternary, which began around 2.6 million years ago and continues to the present day. The alluvial deposits extend over large areas (see Figure 9) and, as described above, characterize most of the Los Angeles Basin (Bedrossian and Roffers 2012). Natural processes and human development can produce variations in the physical setting within the greater alluvial deposit, which corresponds to differences in the likelihood of tribal cultural resources being preserved. Sediment profiles taken during multiple rounds of geotechnical and environmental reporting within the Project site were used to identify any such variations (Buckley and Buenuceso 2018; Feffer and Daneshfar 2017; Nobui and Stout 2002). On the basis of multiple bores drilled within the Project site, these studies have identified fill deposited over alluvial sediments composed of silty sands. The fill has been described as consisting of silty clay and gravelly silty sand ranging in color from orange brown to brown, black, and dark gray, and was noted as containing fragments of glass, wood, metal, concrete, and asphalt. The fill was observed in all bores across the extent of the Project site, extending between 2 and 8 feet. The alluvium consists of gravelly sands, sandy

¹ Dates presented as years B.P. (years before A.D. 1950) are assumed to be uncalibrated radiocarbon years. Calibrated dates will be notated as cal B.P.

clays, and silty sands varying in color from brown to medium-brown, orange-brown, blue-gray, and charcoal-gray. The alluvium is moist to slightly moist, dense, and becomes more granular with depth. The uppermost portions of the alluvial sediments, at least 100 feet, is underlain by Quaternary-age Lakewood and San Pedro bedrock formations composed of interbedded sands and silts. Groundwater was encountered between 7 and 15 feet below the ground surface.

The fill identified within the Project site appears to be a mixture of sediments imported from another location and naturally occurring sediments subjected to grading and excavation, which are associated with a variety of land uses during the twentieth century. Stratigraphic profiles compiled from the bores show variations in the depth of fill. While fill is present in the near surface across the entire Project site, deeper deposits of it were identified in the southern portion of the Project site. The horizontal extent of the fill in this portion was mapped by URS in 2001 (Nobui and Stout 2002) and is shown in Figure 10. Other disturbances include when, in August 1987, one 1,000-gallon and two 550-gallon underground storage tanks were excavated and removed. The 550-gallon tanks were located between former office and housing structures in the center of the Project site; the 1,000-gallon tank was located beneath the northeastern portion of the Project site.

CULTURAL SETTING

Native American Prehistoric Overview

In the last several decades, researchers have devised numerous prehistoric chronological sequences to aid in understanding cultural changes in southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four horizons are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984:159), this situation has been alleviated by the availability of thousands of radiocarbon dates obtained by southern California researchers in the last three decades (Byrd and Raab 2007:217). Given this, several revisions were subsequently made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented below is a composite of information in Wallace (1955) and Warren (1968), as well as later studies, including Koerper and Drover (1983).

Horizon I: Early Man (ca. 10,000–6000 B.C.)

The earliest accepted dates for archaeological sites on the southern California coast are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area approximately 10,000 years ago (Erlandson 1991:105). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego counties contain several sites dating from 9,000 to 10,000 years ago (Byrd and Raab 2007:219; Macko 1998:41; Mason and Peterson 1994:55–57; Sawyer and Koerper 2006). Although the dating of these finds remains controversial, several sets of human remains from the Los Angeles Basin (e.g., “Los Angeles Man,” “La Brea Woman,” and the Haverty skeletons) apparently date to the Middle Holocene, if not earlier (Brooks et al. 1990; Erlandson et al. 2007:54).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2002), and a greater emphasis on large-game hunting inland.

Horizon II: Milling Stone (6000–3000 B.C.)

Set during a drier climatic regime than the previous horizon, the Milling Stone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates) and handstones (manos). Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007:220).

Horizon III: Intermediate (3,000 B.C.–A.D. 500)

The Intermediate horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow et al. 1988; True 1993).

Horizon IV: Late Prehistoric (A.D. 500–Spanish Contact)

In the Late Prehistoric horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Ethnographic Overview section below.

By A.D. 1000, fired clay smoking pipes and ceramic vessels were being used at some sites (Drover 1971, 1975; Meighan 1954; Warren and True 1961). The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed in that area, or that occupants were trading with neighboring groups to the south and east for ceramics. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages (Wallace 1955:223). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European contact, which occurred as early as 1542, is divided into three regional patterns: Chumash (Santa Barbara and Ventura Counties), Takic/Numic (Los Angeles, Orange, and western Riverside Counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside Counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions.

Modern Gabrielino, Juaneño, and Luiseño people in this region are considered the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast in this period.

Native American Ethnographic Overview

The Project site is in an area historically occupied by the Gabrielino (Bean and Smith 1978:538; Kroeber 1925:Plate 57) (Figure 11). Surrounding native groups included the Chumash and Tataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There was well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name “Gabrielino” (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel. This group is now considered to be defined by a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects (Bean and Smith 1978:538). In the post-European contact period, Mission San Gabriel included Natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. There is little evidence that the people we call Gabrielino had a broad term for their group (Dakin 1978:222); rather, they identified themselves as an inhabitant of a specific community with locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker; Johnston 1962:10).

Native words suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v; Merriam 1955:7–86) and Kizh (Kij or Kichereno; Heizer 1968:105), although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino. Nevertheless, many present-day descendants of these people have taken on Tongva as a preferred group name because it has a Native rather than Spanish origin (King 1994:12). The term Gabrielino is used in the remainder of this report to designate Native people of the Los Angeles Basin and their descendants.

The Gabrielino subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like for most Native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Inhabitants supplemented acorns with the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978:546; Kroeber 1925:631–632; McCawley 1996:119–123, 128–131).

The Gabrielino used a variety of tools and implements to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996:7). Gabrielino people processed food with a variety of tools, including hammer stones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925:629; McCawley 1996:129–138).

At the time of Spanish contact, the basis of Gabrielino religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925:637–638). The Chinigchinich religion seems to have been relatively new when the Spanish arrived.

It was spreading south into the southern Takic groups even as Christian missions were being built and may represent a mixture of Native and Christian belief and practices (McCawley 1996:143–144).

Deceased Gabrielino were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996:157). Remains were buried in distinct burial areas, either associated with villages or without apparent village association (Altschul et al. 2007). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966:27), as well as scattered among broken ground stone implements (Cleland et al. 2007). Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Dakin 1978:234–365; Johnston 1962:52–54; McCawley 1996:155–165).

Native American Communities near the Project Site

In general, it has proven very difficult or impossible to establish definitively the precise location of Native American villages occupied in the period after Spanish contact (McCawley 1996:31–32). Native American place names recorded during this period did not necessarily represent continually occupied settlements within discrete locations. Instead, in at least some cases, the communities were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features subject to change over generations (Johnston 1962:122). In fact, many of the villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document any of their locations, at which point the former village sites were affected by urban and agricultural development, and Native American lifeways had been irrevocably changed. Kroeber remarked on the subject as follows:

Many of the latter (i.e., place-names) no doubt originally denoted villages; but it is usually impossible to determine. The Indians of this region, Serrano, Gabrielino, and Luiseño, have long had relations to the old ranchos or land grants, by which chiefly the country was known and designated until the Americans began to dot it with towns. The Indians kept in use, and often still retain, native names for these grants. Some were the designations of the principal village on the grant, others of the particular spot on which the ranch headquarters were erected, still others of the camp sites, or hills, or various natural features. The villages, however, are long since gone, or converted into reservations, and the Indians, with all their native terminology, think in terms of Spanish grants or American towns. Over much of southern California—the “Mission Indian” district—the opportunity to prepare an exact aboriginal village map passed away 50 years ago. (Kroeber 1925:616)

Efforts at relocating former settlements have been further complicated by the frequency with which alternative names and spellings for communities were used, and that there are conflicting reports on the meaning or locational references in the names. Even with archaeological evidence, it can be difficult to conclusively establish whether any given assemblage represents the remains of the former village site.

Although the precise location of any given village is subject to much speculation, it is clear the greater Los Angeles area once contained many Gabrielino settlements, including several concentrated along the banks of major waterways and near the coast (see Figure 11). The Ballona area, composed of the wetland, creek, bluffs, and beach, was clearly important to Native American lifeways as demonstrated through archaeological and ethnographic evidence. Maps attempting to plot significant settlements or places in the Ballona region have typically included one or more locational markers along the east side of Ballona Creek and wetlands (Gumprecht 2001:30; Johnston 1962). Kroeber (1925) included the placename *Sa'an* in this location—on the north side of Ballona Creek at its confluence with the bay—and apparently intended the

name as a region. No historical documents, including baptism or marriage records, have been found that refer to a place by this name. Later, W.W. Robinson posited the name *Guacho* or *Huacho*—meaning “high place” or abandoned—as referring to the Westchester Bluffs, which he determined after consultation with Christobal Machado (Ciolek-Terrello et al. 2007:15; Robinson 1939:14) (Figure 12). Christobal, one of the descendants of Augustin Machado and heir to his Ballona Rancho, is reported to have said that local Indians working as laborers for Augustin in the 1830s had placed their huts not far from the Machado ranch house, located near the Jefferson and Sepulveda Boulevards, and a second group placed them against the hills near Loyola Marymount University (Ciolek-Terrello et al. 2007:15–16).

In her map of Gabrielino settlements, Bernice Johnston (1962) reinstated Kroeber’s regional term but added the Gabrielino locational suffix “-nga,” making *Sa’angna* a specific village, despite her having found no mention of the term in baptismal records (Ciolek-Terrello et al. 2007:15). Attempts to identify the location of the village in the archaeological record failed to produce reliable candidates. The archaeological site CA-LAN-47 was identified as a potential location of *Sa’angna* at one point but was demonstrated through dating of its materials to have been abandoned more than 550 years before Spanish arrival.

McCawley’s (1996) work on Gabrielino history brought more attention to variant spellings of place names, particularly *Waachnga*. Stall et al. (2003) offer a detailed discussion of the history of its reference as a place name and potential locations, including stronger documentary evidence of marriage ties between people from *Guaspét* and neighboring Gabrielino settlement areas (see also, Douglass et al. 2016). Spanish Mission registers note several references to *Guaspét*, *Guasna*, *Guashna*, *Guachpet*, *Guashpet*—the suffix “-pet” referring to a person from a specific place. McCawley linked the name to the Spanish land grant *Guaspita*, which was later combined with the Salinas grant to become Rancho Sausal Redondo. The diseño (a term for Spanish- and Mexican-period maps) created for the rancho uses the names *Guaspita* on bluffs above the Rio de la Bayona (Ballona Creek). This spelling is also seen on the original diseño drawn around 1840 for what was then referred to as Rancho del Paso de las Carretas (“Wagon Pass”), later named Rancho La Ballona (Figure 13). While some debate may still exist, all accounts of *Waachnga* or *Guaspét* point to an area either on the bluffs to the south of Ballona Creek or in the lowlands near the creek (Douglass et al. 2016:416; McCawley 1996:61–63).

Historical Overview

Post-contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

Spanish Period (1769–1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríguez Cabrillo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrillo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno’s crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1886:96–99; Gumprecht 2001:35).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring Southern California, Franciscan Friar Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Juan Crespi, a member of the expedition, named the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Fr. Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Engelhardt 1927). In 1781, a group of 11 Mexican families traveled from Mission San Gabriel Arcángel to establish a new pueblo called El Pueblo de la Reyna de Los Angeles ("the Pueblo of the Queen of the Angels"). This settlement consisted of a small group of adobe-brick houses and streets and would eventually be known as the Ciudad de Los Angeles ("City of Angels").

Mexican Period (1822–1848)

A major emphasis during the Spanish period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants.

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos.

The Project site is located within the former boundary of Rancho La Ballona. Augustin Machado and his wife immigrated to Los Angeles from Sonora in 1781 and were the first family to settle in the Ballona area in 1819 (Marie 1955:52). The Machado family had sole rights to the area until 1839 when Augustin Machado partnered with brothers Felipe and Tomas Talamantes (Scott 2004:27). The Machado and Talamantes families stocked Rancho La Ballona with cattle, planted vineyards and other crops, and built houses on the land. It is reported that Native Americans who lived near the Machado adobe residence and near present-day Loyola University supplied much of the labor for these projects (Marie 1955:53).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of non-Native inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period (1848–Present)

War in 1846 between Mexico and the United States began at the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. This battle was a defeat for the Americans and bolstered the Californios' resolve against American rule, emboldening them to continue the offensive in later battles at Dominguez Field and in San Gabriel (Beattie 1942). However, this early skirmish was not a sign of things to come and the Americans were ultimately the victors of this 2-year war. The Mexican–American War officially ended with the Treaty of Guadalupe Hidalgo in 1848, which resulted in the annexation of California and much of the present-day southwest, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848; with the influx of people seeking gold, cattle were no longer desired mainly for their hides, but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 1941).

On April 4, 1850, only 2 years after the Mexican–American War and 5 months prior to California's achieving statehood, Los Angeles was officially incorporated as an American city. Settlement of the Los Angeles region continued steadily throughout the Early American period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California's acquiring official statehood in the United States. At that time, the city was bordered on the north by the Los Felis and the San Rafael Land Grants and on the south by the San Antonio Luge Land Grant. Many of the ranchos in the area now known as Los Angeles County remained intact after the United States took possession of California; however, a severe drought in the 1860s resulted in many of the ranchos being sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

The Mexican–American War and the influx of new people brought many changes to the ranchos of Los Angeles, including Rancho La Ballona. As the population of the greater Los Angeles area expanded greatly, the price of beef rose dramatically and crime increased throughout the area (Scott 2004:32). The change in government also led to logistical problems for rancho owners who were forced to engage in difficult and lengthy legal processes in order to re-secure the title of their land under American authorities. The Treaty of Guadalupe Hidalgo guaranteed protection of land rights to property holders, which, after California statehood was granted in 1850, required the state to reassess thousands of claims. The California Land Act gave landowners 2 years to submit claims to U.S. district courts in California. The land claim for Rancho Ballona was filed in 1852 by Augustin Machado and confirmed in 1854, which was upheld in 1857 after an appeal (Hoffman et al. 1862:51). The 13,920-acre rancho was later surveyed in 1858 by Henry Hancock, which shows the Project site on the edge of what was then the inner bay (Figure 14). In their research evaluating partition-suit records, Clay and Troesken (2005:58–62) list 15 separate claimants for Rancho La Ballona, including the following in order of largest to smallest share-holdings: Estate of Augustin Machado, Heirs of Augustin Machado (including Antonio, Jose Andres, Cristobal, and Rafael Machado), John D. Young, Maced Aguilar, Geo. Ad. Sanford, Elen. Young, Laurinao Talamantes, Manuel Valenzuela, Fr. and Dal Machado, Benina Ralamantes, Gregoria Talamantes, Tomasa Talamantes, Pedro Talamantes, Jacinto Talamantes, and Jesus Talamantes.

All of these issues coupled with a floundering cattle business forced many rancho owners to sell off their land by the late nineteenth and early twentieth century (Scott 2004:34). For Rancho Ballona, the passing of Machado in 1865 triggered the break up of the rancho as it began to be subdivided into smaller tracts granted to his heirs. Various surveys of the tracts were commissioned and published in the following decades. In 1868 the rancho had been re-surveyed and the resulting map depicts the location of the Project site within a 463.78-acre partition deeded to Andres, Jose Antonio, Rafael, and Christobal Machado (see **Error! Reference source not found.**). At least one subsequent subdivision is apparent in a survey map published in 1872, which shows the Project site within a 115.9-acre parcel owned by Christobal Machado. Both tracts continued to be subdivided and sold to Americans. Notably, during the period after the Mexican–American War, the immigrants who came to Los Angeles often ignored the Mexican land rights, resulting in squatters throughout Rancho La Ballona. By the 1870s, Rancho La Ballona was home to a multitude of squatters who were attempting to develop a commercial duck hunting facility (Van Horn and White 1997). Hunting and fishing in the Ballona area continued to be a favorite recreational activity in the 1880s.

The first major development project in the Ballona area was an attempt by the Santa Fe Railroad to build a harbor. Work to achieve this goal began in 1887 with the construction of a railroad, the dredging of the wetland, and the construction of two wharfs (Dillon 1996:28). This investment in infrastructure led to the birth of several towns in the area; however, the initial venture was a failure, the town and port were never built, and dredging was halted because of its impracticality (Basten 1974:12; Dillon 1996:28). This episode represents the beginning of the end for the Ballona wetlands, which were decimated by further development in the area during the end of the nineteenth and the beginning of the twentieth century. Oil drilling was prevalent in the first few decades of the twentieth century, including one well drilled in 1929 either within the Project site or immediately nearby. Much of the area still included small-scale agricultural plots and truck farming, including several run by Japanese farmers (Altschul et al. 1992: 81–85).

As the area became more popular among tourists, one well-to-do tobacco tycoon turned developer saw a golden opportunity to create a lucrative beach resort town. Originally from New Jersey, Abbot Kinney made his wealth working in his older brother’s tobacco company. In 1880 he decided to relocate to Southern California where he became interested in land development (Moran 2004; Sullivan 1990). After a failed venture in Pacific Palisades, Kinney and his partner bought Ocean Park Casino and the surrounding tract of land in 1891. Eventually Kinney and his partners dissolved their property with Kinney maintaining ownership of the undeveloped southern half, which included present-day Venice. With this land Kinney decided to build Venice of America—a recreation of Venice, Italy, complete with dredged canals, a Venetian-style business district, and an auditorium (Moran 2004; Olen 2014:158).

The early twentieth century saw a massive investment in electric trolley lines within Los Angeles and by 1903 there was a Pacific Electric Car Trolley connecting the center of Los Angeles to Venice of America (Masters 2014b). The Pacific Electric Car ran for 13 miles along Venice Boulevard and was known as the “Venice Short Line.” The line, initially owned and operated by the Pasadena & Pacific Railway Company and later taken over by Pacific Electric in 1911, was the most used beach line within the Los Angeles metro system at the time (ERHA 2019).

The 1920s brought a new type of development to the area through the growth of the aviation industry (Masters 2014a). The area where the Santa Monica Airport is now located, approximately 1.9 miles northeast of the Project site, was used as a landing strip as early as 1917. Though at this early time the runway and landing strip was only a grassy flat area, an official airport was commissioned by the U.S. Army in 1922 and named Clover Field in honor of an American pilot killed in World War I (Masters 2014a). The area came under ownership of the city of Santa Monica in 1927 and was then renamed Santa Monica Airport (Masters 2014a). One of the major companies in the aeronautics field at the time was Douglas Aircraft Company which operated out of Santa Monica Airport. Douglas Aircraft became known worldwide

when its World Cruiser biplane became the first aircraft to successfully circumnavigate the globe in the 1920s.

World War II and the growth of the aeronautics industry resulted in a population boom in the neighborhoods surrounding Project site including West L.A., Culver City, and Santa Monica. The war brought a new urgency to the aerospace industry, exemplified in the growth of Douglas Aircraft and its intense schedule. During these years the company employed 44,000 people in three shifts 24 hours a day, 7 days a week. Housing for all the employees became a necessity, resulting in a massive investment in single-family residential homes in the area surrounding the airport (City of Santa Monica 2019).

Development of the Project Site

Topographic maps produced between late nineteenth and middle twentieth century depict the transformation of the Project site from an open alluvial plain into an increasingly urbanized setting (Figure 15 and Figure 16). An 1876 topographic map shows the Project site adjacent to a small agricultural plot, located on the northeast side of what is now Thatcher Avenue. At the urging of Abbot Kinney, the Santa Fe Railroad acquire a right-of-way and constructed a spur line connecting the old “Port Ballona” tracks to Ocean Park (Altschul et al. 1992:68). Known as the Southern California Railroad, the construction was done by a local Santa Fe Railroad subsidiary, California Central Railroad, and was completed in 1892. The rail line first appears on topographic maps in 1896, where it can be seen running just south of the Project site (see Figure 15 and Figure 16). The track was later acquired by Pacific Electric and remained in operation as part of their system through the middle of the twentieth century. The line eventually came to be owned by the Southern Pacific Transportation Company, who abandoned the 60-foot-wide right-of-way in 1977. The tracks were removed around 1980 and was converted to Admiralty Park.

Between 1876 and the early 1920s, it’s not clear whether the Project site was undeveloped land adjacent to the railroad or if it had been developed for agricultural uses. The earliest aerial photographs of the Project site were taken in 1927 that indicate something other than agricultural use, despite the surrounding parcels being utilized for that purpose (Figure 17). A well monitoring report prepared by URS for the Project site notes that the property was originally acquired in 1916 by the City of Los Angeles (Nobui and Stout 2002:1). The assessor maps and records needed to confirm this information were not obtained for this study, but the claim seems plausible based on available information. Previous studies have noted the possible presence of an abandoned oil well. The Department of Oil Gas and Geothermal Resources (DOGGR) well records indicate that in 1929 a dry exploratory well—Del Rey No. 1—was drilled near the Project site. Although the DOGGR spatial data currently show the well as having been located directly within the Project site, the original map shows the well as having been located south of the Pacific Electric Railway right-of-way, more than 300 feet away from the Project site.

Several studies have also noted that trash dumping was a frequent occurrence in the first half of the twentieth century, both within the Ballona wetlands periphery in general and the Project site specifically. At least one account by local residents describes the general area as having been used for dumping in the first half of the twentieth century, which was attributed to the area having been conveniently situated outside the City limits (Altschul et al. 1992: 75; Ciolek-Terrello et al. 2007: 16). Apparently, the area between Washington Street and the Ballona wetland was especially used in the 1903s for trash disposal (Wlodarski 1997: 22). Aerial photographs of the Project site taken prior to its paving show a series of modifications to the parcel that are consistent with its use as a dump or waste transfer station (see Figure 17). Photographs from 1927 show a fence or berm constructed on the northwestern side and surface disturbances consistent with use with heavy vehicle traffic within the northern two-thirds of the Project site. Some of the activity appears to have involved portions of the parcel across Thatcher Avenue to the northeast, where small structure and similar looking ground disturbances are visible. By 1938 the modifications to the site are more apparent and seem to have continued the pattern of land-use faintly visible in the photographs taken 10 years prior,

with the southeastern third of the Project site appearing to remain unmodified. The aerial photograph taken in 1947 shows unpaved but clearly established haul roads originating from what is now the intersection of Thatcher Avenue and Princeton Drive. One portion of the road leads to what appears to be a small structure on the northwestern portion of the Project site, while the second leads to what appears to be a pit excavated in the southern third of the Project site. A second structure appears to be present along the northern edge of the Project site, along Princeton Drive.

Aerial photographs taken after 1952 show the Project site be more formally developed (Figure 18). During this time in the 1950s and early 1960s, these developments were occurring at the same time the wetland was being converted into the small-craft harbor during the 1950s and early 1960s. At least by the early 1950s, the Project site was divided and developed independently as a northern and southern half. Most recently the designated addresses were listed as 3311 Thatcher Avenue for the southern portion and 3233 Thatcher Avenue for the northern portion. The Department of Building and Safety records show three new building construction permits issued in 1950 to the following addresses: 3225, 3233, and 3235 S. Thatcher Avenue. A Certificate of Occupancy was issued in 1951, which notes that the property includes a one-story service station measuring 37 by 24 feet, located at 3235 S. Thatcher Avenue. The northern portion was reportedly operated as the Venice-Westchester District Sewer Maintenance Yard. The structures are visible within the otherwise paved lots in the 1952 aerial photograph (see Figure 18). Various onsite structures were constructed within this portion of the site between 1950 and 1989 while it continued to operate in various capacities. Most recently, the property functioned as the Los Angeles Wastewater Collection System Division Training Facility and was also used by a construction contractor.

The southern half was not paved until the early 1960s when it is reported to have been at a slightly lower grade and later back-filled (Buckley and Buenuceso 2018: 3). The southern portion of the Project site was operated by the City of Los Angeles as the Thatcher Avenue Street Maintenance and Transfer Yard (Thatcher Yard), whose main function was to perform minor asphalt street resurfacing, and weed and waste abatement (Buckley and Buenuceso 2019:2). Later the lot would be used by the Los Angeles Department of Public Works, Bureau of Street Maintenance. Once both northern and southern portions of the Project site were paved, various onsite structures were constructed between 1950 and 1989, which did not likely require much or any excavation for foundations. The paved lots and structures appear to have served multiple functions to serve various needs. At the time when all the extant structures were demolished in 2016, which included the former service station with canopy, office building with service bays, structure with service bays, areas of storage equipment and supplies, simulation training facility. Notably, in 1987 three underground storage tanks were removed from different areas within the Project site (Mulhern 2015).

RESULTS

California Historical Resources Information System Records Search

Previously Conducted Cultural Resource Studies

Results of the records search at the SCCIC indicate that 29 cultural resource studies have been conducted within 0.5 mile of the Project site (Table 1), three of which directly overlap the Project site (LA-08157, LA-10880, and LA-12989). Of the three reports whose study areas were mapped as intersecting the Project site, only LA-08157 (Foster 2007) was relevant to the assessment of tribal cultural resources. The others were either focused on historical buildings or lacked any specific investigation of the Thatcher Yard Project site within the larger study area. Of the studies identified in the surrounding radius, ten were identified as having information potentially relevant to assessing tribal cultural resources for the Thatcher Yard Project site, which were reviewed and are summarized in more detail below. The boundaries for these selected

studies are depicted in Figure 19 and include the following: LA-00069, LA-00253, LA-02372, LA-02558, LA-02669, LA-02673, LA-03495, LA-03592, LA-03929, and LA-09696).

Table 1. Previously Conducted Cultural Resource Studies within 0.5 Mile of the Project Site

SCCIC Report Number	Title	Study Type	Author: Affiliation	Year	Relationship to Project Site
LA-00069	Evaluation of the Archaeological Resources in Playa Del Rey Area, Leighton and Associates	Archaeological, field study	Rosen, Martin D.: University of California, Los Angeles	1974	Outside
LA-00253	Report on Preliminary Archaeological Investigations at CA-LAN-47, the Admiralty Site, Marina Del Rey, California	Excavation	Dillon, Brian D., Kevin O. Pope, Susan Colby, Carol Goldberg, James Velasquez: Brian D. Dillon, Consulting Archaeologist.	1988	Outside
LA-01975	Cultural Resource Survey and Clearance Report for the Proposed American Telephone and Telegraph Los Angeles Airport Central Office to the Santa Monica Central Office Fiberoptic Communication Route	Archaeological, field study	Neuenschwander, Neal J.: Peak & Associates, Inc.	1989	Outside
LA-02372	Late Prehistoric Change in the Ballona Wetland	Other research	Homburg, Jeffrey A.: Statistical Research, Inc.	1991	Outside
LA-02558	Gateway Project	Excavation	Altschul, Jeffery: Statistical Research, Inc.	1990	Outside
LA-02669	Draft Background and Environmental Impact Report Venice District	Management/ planning	Gervais, Richard: Department of City Planning	1992	Outside
LA-02673	Life in Ballona: Archaeological Investigations at the Admiralty Site (CA-LAN-47) and the Channel Gateway Site (CA-LAN-1596\H)	Excavation	Altschul, Jeffery H., Jeffery A. Homburg, and Richard S. Ciolek-Torrello: Statistical Research, Inc.	1992	Outside
LA-03495	A Review of Indian Burial Findings at Marina Del Rey	Archaeological, field study	Levine, Harvey S.: County of Los Angeles Department of Small Craft Harbors	1969	Outside
LA-03506	Ucas-1963-x2 Venice Boulevard, Route 163, Los Angeles County	Archaeological, field study	Sweet, R. K.: UCAS	1963	Outside
LA-03592	Phase I Archaeological Study for the Marina View Apartments 3300 and 3324 Thatcher Ave. Marina Del Rey, City of Los Angeles	Archaeological, field study	Wlodarski, Robert J.: Historical, Environmental, Archaeological, Research Team	1997	Outside
LA-03665	Archaeological Impact Assessment of the Price-Costco Plaza Project 18.4 Acres in Culver City, Los Angeles County, California	Archaeological, field study	Dillon, Brian D.	1996	Outside
LA-03898	Proposal for Archaeological Investigations in the Area of Hammock Street and Port Drive (vii-l.a.-90,405; Lincoln Blvd. to Slauson Avenue)	Archaeological, other research	Anonymous	n.d.	Outside
LA-03929	Archaeological Monitoring Report, Marina View Apartment Project, 3300 and 3324 Thatcher Avenue, Marina Del Rey, City of Los Angeles, California	Monitoring	Wlodarski, Robert J.: Historical, Environmental, Archaeological, Research Team	1998	Outside
LA-04052	Archaeological Reconnaissance for the Marina Del Rey Pipeline, Venice, Los Angeles County, California	Archaeological, field study	King, Chester: Topanga Anthropological Consultants	1998	Outside

SCCIC Report Number	Title	Study Type	Author: Affiliation	Year	Relationship to Project Site
LA-04465	Addendum Archaeological Reconnaissance for the Marina Del Rey Pipeline, Venice Los Angeles County, California.	Archaeological, field study	King, Chester: Topanga Anthropological Consultants	1999	Outside
LA-04664	Archaeological Monitoring the Costco Plaza Project Culver City, California	Monitoring	Hale, Alice E.: Greenwood and Associates	1999	Outside
LA-04866	Cultural Resource Assessment Cingular Wireless Facility No. Sm 054-01, Los Angeles County, California	Literature search	Wallock, Nicole: LSA Associates, Inc.	2001	Outside
LA-05563	Request for Determination of Effect	Architectural/historical	National Park Services	1985	Outside
LA-05757	Negative Archaeological Survey Report - Widening and Signal Upgrades on the West Side of the Intersection at Lincoln Boulevard and Mindanao Way, Remove the Raised Islands on Lincoln Blvd. Between Fiji Way and Mindanao Way, Re-stripe Lincoln Blvd.	Archaeological, field study	Iverson, Gary: Caltrans District 7	1998	Outside
LA-06239	El Segundo Power Redevelopment Project Cultural Resources (archaeological Resources) Appendix J of Application for Certification	Archaeological, architectural/historical, field study	Wesson, Alex, Bryon Bass, and Brian Hatoff: URS Corporation	2000	Outside
LA-06240	El Segundo Power Redevelopment Project Historic Resources (Built Environment) Appendix K of Application for Certification	Architectural/historical, evaluation	Bunse, Meta and Mikesell, Stephen D.: JRP Historical Consulting Services	2000	Outside
LA-06244	Cultural Resource Assessment at & T Wireless Services Facility No. D092.2 Los Angeles County, California	Literature search	Duke, Curt: LSA Associates, Inc.	2002	Outside
LA-07720	Results of a Phase I Cultural Resources Investigation of the Marina Del Rey "parcel Ot", Approximately 2.11 Acres in Marina Del Rey, Los Angeles County, California	Archaeological, field study	McKenna, Jeanette A.	2006	Outside
LA-07721	Results of a Phase I Cultural Resources Investigation of the Marina Parcel 21 Project Area, Approximately 2.55 Acres in Marina Del Rey, Los Angeles County, California	Archaeological, field study	McKenna, Jeanette A.	2006	Outside
LA-08157	Archaeological Investigation for Thatcher Yard Demolition Project (work Order E1905949) 3233 and 3311 South Thatcher Avenue, City of Los Angeles, California	Archaeological, field study	Foster, John M.: Greenwood and Associates	2007	Within
LA-09696	Mitigation Plan for CA-LAN-47, Marina Del Rey, California; Statistical Research, Inc Technical Report 07-05.	Management/planning	Ciolek-Torrello, Richard, John G. Douglass, Jeffrey A. Homburg, and Donn R. Grenda: Statistical Research, Inc.	2007	Outside
LA-10880	Tahiti Marina application for Department of the Army authorization	Archaeological, field study	Trinh, Phoung: Department of the Army Corps of Engineers	2007	Within
LA-11819	Historical resources Evaluation Report for the SR 90 Realignment and Admiralty Way Improvements Projects Marina Del Rey, California	Architectural/historical, evaluation	Hirsch, Jennifer: EDAW	2006	Outside

SCCIC Report Number	Title	Study Type	Author: Affiliation	Year	Relationship to Project Site
LA-12989	Survey LA, Los Angeles Historic Resources Survey: Historic Resources Survey Report Venice Community Plan Area	Architectural/historical, evaluation, field study	Anonymous: Historic Resources Group	2015	Within (built environment regional overview)

THATCHER YARD: LA-08157

This report is the 2007 archaeological investigation for the Thatcher Yard Demolition Project prepared by Greenwood and Associates in support of the construction of a 4,000-square-foot vehicle maintenance building, parking lot, and new yard wall. A field survey found that the entire facility was covered in structures and asphalt, with the only visible ground surface along the south fence. Marine shell fragments were observed eroding out of footpaths between Thatcher Avenue and the green belt adjacent to Admiralty Way. The author determined that the Project site is sensitive for archaeological resources based on their records search. He recommended that, due to its proximity to the Admiralty Site (CA-LAN-47), limited mechanical trenching of the Project site be used to determine if buried deposits are present. If no trenching is undertaken, monitoring during construction was strongly recommended.

3300–3324 THATCHER AVENUE: LA-03592 AND LA-03929

These two archaeological studies were completed as part of the planning and construction phases of the Marina View Apartment Complex, located at 3300 and 3324 Thatcher Way, which is across from the Project site on the east side of Thatcher Avenue. Several vacant structures, including office spaces, trailers, and a residence were within the property boundary, and the majority of the ground surface was covered in asphalt and concrete. Six geotechnical borings were placed in intervals throughout the property and revealed no anomalies. Surface survey identified no prehistoric or historic archaeological resources within the Project site. They proposed that any resources encountered within the Project site are likely associated with CA-LAN-47 or the Channel Gateway Site (CA-LAN-1596H). The authors recommended archaeological monitoring during any subsurface operations including but not limited to grading, excavating, trenching, or removal of existing structures on the property. The subsequent monitoring did not identify any archaeological resources within the property.

ADMIRALTY AND CHANNEL GATEWAY SITE: LA-00069, LA-00253, LA-02372, LA-02558, LA-02669, LA-02673, LA-03495, AND LA-09696

In the vicinity east and southeast of the Project site, a total of eight studies were conducted that involved archaeological investigations of CA-LAN-47 and CA-LAN-1596H, both as research- and project-driven efforts. LA-69 was conducted in 1974 and presents a review of previously recorded archaeological resources within the La Ballona Creek and Playa del Rey region. The study used archival materials housed at the University of California, Los Angeles.

The sites date from early to late horizons and include the Historic period, and range from significantly disturbed to relatively good condition. The author stated that likely only a portion of the sites that once existed or still exist in the area are currently known and recommended that when future development in La Ballona Creek occurs, archaeologists complete a survey and environmental impact statement prior to landscape modification. Site locations are hand-drawn on a topographic map. Depicted sites are: CA-LAN-47, 53, 54, 57, 59, 60, 61, 62, 63, 64, 65, 66, 136, 194, 203, 204, 206, 211, 212, 213, 216, and 356. The two unrecorded sites had not yet been given a permanent accession number.

LA-00253 is a preliminary report on archaeological investigations at CA-LAN-47 conducted in 1988. Two study areas were investigated: a police impound yard and a railroad right-of-way (ROW). Study methods

and results included surface collection and excavation in both locations. The impound yard revealed mixed historical and modern refuse, including one 1919 Buffalo Nickel. The railroad ROW contained intact shell midden (predominately Chione, as well as oyster and scallop), and included shell beads, lithic tools and debitage (predominately basalt, followed by andesite, chert, and quartzite), ground stone bowl and mano fragments, shell fragments, and animal bone.

LA-02372 was prepared by SRI and examined prehistoric settlement patterns in the Ballona wetland area and its surroundings, and discussed the current lack of evidence of permanent habitation, particularly during the Late Period (1000 B.P. and later). The authors considered flood events and silt deposition in the wetland during the Late Period as contributors to a change in subsistence strategies, including an increase in settlements on lagoon edges, such as CA-LAN-47. They also suggested that Ballona inhabitants during this time period shifted focus to somewhat more coastal fishing rather than relying on lagoon and marsh species. At CA-LAN-47 in particular, emphasis appears to have been on shellfish foraging, supplemented by the gathering of plants available along the lagoon edges. The authors concluded that the issue of permanent habitation in the Ballona is an unresolved one, and offered hypotheses as to why, including the possibility that the area itself was too variable to support permanent habitation, or that it was simply exploited on an opportunistic basis only.

LA-02558 is a mitigation monitoring program written in 1990 as part of the final environmental impact report (EIR) of the Channel Gateway Project and includes relevant attachments. It describes the results of the archaeological data recovery performed by SRI at CA-LAN-47 and CA-LAN-1596H, which includes the remains of a possible Japanese farm labor camp. SRI recommended an interim determination of no adverse effect to cultural resources through data recovery and numerous other conditions, including avoidance of CA-LAN-47 outside the direct impact zone, and archaeological and Native American monitoring in the portion of CA-LAN-47 that lies within the direct impact zone.

LA-02669 is a draft background and EIR prepared in 1978 for the Proposed Venice Community Plan, prepared for the Los Angeles Department of City Planning by Richard Gervais of City Hall. Attachments include letters to Mr. Gervais from Louis Tartaglia of the Northridge Archaeological Research Center and Nancy Walter, anthropology professor (unknown affiliation) citing concerns that the draft EIR did not take into account cultural or archaeological resources within the community plan area, nor any proposals or plans to preserve or document these resources.

LA-02673 is an extensive archaeological report written by SRI in 1992 that describes the results of investigations which took place at CA-LAN-47 and CA-LAN-1596H in support of the Channel Gateway Project. In the conclusion, the authors described the “resilience” of CA-LAN-47 to development and suggested that portions of the midden may remain intact. They supported this idea with the reminder that much of the development in the area was built on dredge spoils which likely capped prehistoric resources. They also recommended several directions for future research, including more sampling along the lagoon edge to establish the spatial boundaries of the midden, as well as more research into the Machado railroad and the associated Japanese labor camp remains found in CA-LAN-1596H.

LA-03495 was prepared in 1969 as a review of newly identified Native American burials at Marina del Rey for the County of Los Angeles Department of Small Craft Harbors, Marina del Rey Reporter. The remains were discovered and removed by workers constructing a new restaurant. The remains were mistakenly taken to the morgue by the workers and later retrieved and sent to the University of California, Los Angeles Archaeological Survey for analysis. The report states that this is the third of such recent discoveries, the first in 1961 and the second in 1965, all within the same area of what is now known as CA-LAN-47. The author also mentioned that several other burials during around the time of the 1965 discovery were looted by “amateur archaeologists and workmen.” The newly identified remains described in this report were located between the 1961 and 1965 remains and included stone tools.

Previously Recorded Resources

The CHRIS records search identified a total of six previously documented archaeological resources within a 0.5-mile radius of the Project site: one prehistoric site (CA-LAN-47), two historical sites (CA-LAN-1596H and CA-LAN-4299H), and three historical built environment resources (P-19-186163, P-19-186164, and P-19-186165). None of the resources are plotted within the Project site. The closest prehistoric site, the Admiralty Site (CA-LAN-47) includes components that could be considered a tribal cultural resource. The location is now heavily developed, but excavation records describe inhumations, lithic tools, shell beads, and ground stone among the artifact assemblage (see description for CA-LAN-47 below). Archaeological data recovery was conducted for the site and the results were published by Dillon (1988) and SRI (1992). One historical resource, CA-LAN-1596H, is located approximately 200 m to the northeast of the Project site and includes foundations, refuse scatters, and other historic features. The site, in a similar setting to the Project site, demonstrates the nature of existing disturbances which have occurred above the areas in which prehistoric sites would have been preserved. CA-LAN-4299H is a historic-period resource to the northeast of CA-LAN-1596H and approximately 0.3 mile northeast of the Project site and was not examined in detail for the purposes of this report. The built environment resources of three historical structures, P-19-186163, P-19-186164, and P-19-186165, are located up approximately 0.3 to 0.4 mile southeast of the Project site and were also not examined for the purposes of this report.

Table 2. Previously Recorded Cultural Resources within the Project Site and 0.5-Mile Radius

Primary Number	Trinomial Number	Type	Resource Description	Recording Year (Name, Affiliation)	Relationship to Project Site
P-19-000047	CA-LAN-000047	Prehistoric Site	Human remains, lithic scatter, habitation debris	1961 (K. Johnson); 1965 (Burnham and Romoli); 1988 (Marcus Lopez, Alliance of Native Americans); 1988 (Vera Rocha, Gabrielino Indian People)	Outside
P-19-001596	CA-LAN-001596H	Historic Site	Concrete footing, refuse pits, well	1989 (Steven Troncone, SRI)	Outside
P-19-004299	CA-LAN-004299H	Historic Site	Foundations/structure pads, trash scatters, wall or fence	2011 (N. Harris, Chambers Group, Inc)	Outside
P-19-186163	–	Historic building	Commercial building	2006 (J. Hirsch, EDAW, Inc)	Outside
P-19-186164	–	Historic building	Commercial building	2006 (J. Hirsch, EDAW, Inc)	Outside
P-19-186165	–	Historic building	Commercial building	2006 (J. Hirsch, EDAW, Inc)	Outside

CA-LAN-47

Site P-19-000047 (CA-LAN-47), the Admiralty Site, is situated on the edge of the former Ballona wetland, specifically an alkali meadow (Figure B-1 and Figure B-2). It was first recorded in the 1940s; however, all documents from that initial recording have been lost. In 1961, Keith Johnson conducted a salvage excavation during the construction of Marina del Rey harbor by the U.S. Army Corps of Engineers. He identified a thin shell midden over 100 yards in diameter and 16 inches deep, at least four human burials, stone bowl fragments, projectile points, debitage, choppers, hammerstones, scrapers, pestles, ground stone fragments, bone tools, antler harpoons, shell beads, and shellfish and faunal remains. The site, including two of the burials, had already been considerably disturbed due to plowing and bulldozing associated with harbor construction. Four more burials were later found during salvage excavations: two in 1965 (after the discovery of remains during the setting of a trench wall for Surety National Bank) and two in 1969 (removed by workers during restaurant construction).

In 1988, Dillon and colleagues conducted an investigation at CA-LAN-47 summarized in the previous section (LA-00253). At this point, the site had been graded, filled, and was used as a police impound yard and railway ROW (Figure B-3). Excavations, however, revealed intact midden below the disturbed surface layer as well as lithic tools and debitage, shell beads, ground stone fragments, and shell and faunal fragments. Archaeologists with SRI returned in 1989 during the Channel Gateway Project, excavating a small area of preserved midden in the northern portion of the site area. This research revealed that the site was occupied for a short time (ca. A.D. 1050–1150), and the occupants subsisted primarily on marsh and lagoon resources, particularly shellfish, waterfowl, fish, small mammals, and seeds and berries. Unlike most Ballona wetland sites situated on the bluffs above the southern edge of the wetland area or at the base of the bluffs, CA-LAN-47 is located on the edge of the wetland in an alkali meadow. The Late Period occupation of the site coincided with the Medieval Climactic Anomaly, a time when environmental changes resulted in the abandonment of nearly all of the habitation sites in the Ballona wetland area, possibly due to the silting in of the wetland or changes in the course of the Los Angeles River. As mentioned above, CA-LAN-47 had been proposed by some to be a village named *Sa'angna*, reportedly occupied at the time of Portolá's expedition in 1769 (see discussion above concerning names of Native American settlements). However, the site appears to have been abandoned hundreds of years before Spanish contact and no ethnohistoric components have been recovered from the site to establish whether it was re-occupied after that time (Altschul et al. 1992).

NATIVE AMERICAN COORDINATION

Sacred Lands File Search

An SLF search was conducted by the NAHC at the request of EcoTierra Consulting. On May 15, 2019, a NAHC letter to EcoTierra indicated positive results². The NAHC advised EcoTierra to contact Robert Dorame, Chairperson of the Gabrielino Tongva Indians of California Tribal Council, for more information. Additionally, the NAHC provided a list of five Native American individuals or tribal organizations that may have knowledge of cultural resources in or near the study area and recommended that they be contacted prior to work. The names of these individuals and tribal organizations are listed in Table 3. The NAHC letter is included in Appendix C. Outreach to Mr. Dorame is pending; any results may be added as another appendix to this report or otherwise reported and included with the Project file maintained by City Planning.

Table 3. Native American Individuals and Groups Culturally Affiliated with the Project Site

Name and Title	Affiliation
Andrew Salas, Chairperson	Gabrieleño Band of Mission Indians – Kizh Nation
Anthony Morales, Chairperson	Gabrieleno/Tongva San Gabriel Band of Mission Indians
Sandonne Goad, Chairperson	Gabrielino/Tongva Nation
Robert F. Dorame, Chairperson	Gabrielino Tongva Indians of California Tribal Council
Charles Alvarez	Gabrielino – Tongva Tribe

² The contents and location of sites in the SLF are confidential and not disclosed in the letter.

SENSITIVITY ASSESSMENT

Native American Settlement Patterns

The CHRIS records search did not identify any previously recorded archaeological sites (i.e., those that could be considered tribal cultural resources) directly within the Project site. However, a search of the SLF returned by the NAHC identified positive results (specific location and nature of the resources is undisclosed) and the CHRIS records identified one prehistoric archaeological site (CA-LAN-47, also known as the Admiralty Site) approximately 830 feet to the southeast. The existence of LAN-47 was first recorded in the 1940s. Significant archaeological deposits and human burials were documented in the mid to late 1960s as part of a salvage efforts conducted during the construction of the harbor. Focused archaeological testing and excavations were completed in the late 1980s on a very small portion of the site that was preserved within the former railroad ROW. As a result of the work conducted by SRI in 1989, archaeologists were able to determine that the site was occupied by Native Americans between A.D. 1050 and 1150. During this period sedimentation along the periphery of the Ballona wetland had created more habitable zones. In contrast, the archaeological record reflects more intensive settlement in the higher elevations of the bluffs on the southwest margin of the wetland and along Ballona Creek, which include occupation dates going back at least 7,000 years.

Occupation (or abandonment) of specific areas within the Ballona area after the time of Spanish contact is not clear. In large part, this is because of gaps in the historical record prior to the time when firsthand accounts were recorded and ethnographic studies of the Gabrielino were carried out. The nearest Gabrielino place names identified in the ethnographic literature are *Waachgna* and *Guaspét*, located approximately 1.5 to 2 miles southeast of the Project site. Further evidence is needed to resolve questions concerning the location and nature of these two place names, but all accounts of *Waachgna* or *Guaspét* point to an area either on the bluffs to the south of Ballona Creek or in the lowlands near the creek (Douglass et al. 2016:416; McCawley 1996:61–63).

Whether archaeological sites in the Ballona area that postdate A.D. 1000 were created as a result of permanent settlement or temporary camps is not well understood. It is also not clear whether the comparatively fewer archaeological sites in the lower elevations adjacent to the wetland (versus the bluffs) is a result of sample bias—fewer investigations have been undertaken to look for the sites—or if the sites were destroyed before they could be recorded. Nevertheless, decades of archaeological research in the greater Ballona region has made it clear that the wetland provided important resources for Native Americans for thousands of years. Therefore, based solely on the location of the Project site along the periphery of the former Ballona wetland and the proximity to a previously recorded Late Prehistoric habitation site, the tribal cultural resources sensitivity is high.

Preservation Potential

Questions related to the likelihood of physical remains being preserved in a given area—preservation potential—must consider several variables that are independent of questions related to the likelihood that the archaeological materials were deposited in the first place. Specifically, the scale of the Project site, physical properties of the setting (e.g., soils, geomorphology), land-use history, and existing subsurface disturbances must be considered and given weight in determining the preservation potential. The Project site is situated within Quaternary alluvium overlaid by artificial fill. Archaeological testing and excavations completed for developments in the vicinity of the Project site have demonstrated that buried tribal cultural resources can be preserved within natural alluvial deposits found beneath or directly adjacent to areas subject to disturbances associated with Historic-period developments. Disturbances are typically represented in sediment profiles as artificial fill. In urban settings, it is not unusual for Native American artifacts and objects to be intermixed with artificial fill, which could be an indication of an intact deposit

underlying the Historic-period disturbance. The 1989 excavations of CA-LAN-47 found that the former railroad ROW had acted as a buffer against the surrounding historical developments and preserved the archaeological remains.

Numerous rounds of subsurface geophysical testing within the Project site have identified artificial fill in the surface stratum, extending between 2 and 8 feet. The fill identified within the Project site appears to be a mixture of sediments imported from another location and naturally occurring sediments subjected to grading and excavation, which are associated with a variety of land uses during the twentieth century, including oil drilling, trash dumping, and city maintenance and training yards. Therefore, the fill is considered to represent disturbances to the physical setting as it concerns the potential for tribal cultural resources. Historical aerial photographs and the sediment profiles both indicate disturbances in the near surface across the entire horizontal extent of the Project site but in an especially deep, discrete deposit in the southern portion of the Project site. The deep deposit of artificial fill seems to fit with aerial photographs that predate the time in which the Project site was fully paved, sometime after 1952, showing what appears to be a large trash pit excavated into the site, accessed by an unpaved haul road originating from the intersection of Thatcher Avenue and Princeton Drive (Figure 20). Although smaller in size than the trash pit, other discrete subsurface disturbances identified within the project site resulted from the installation and removal of underground storage tanks in the central and northeastern portions of the Project site. Other disturbances to the natural setting also resulted from the construction of several buildings and any site preparation done in advance of the paving. Most of these activities appeared to have been conducted in the center and northern portion of the Project site—the northern portion of the former Thatcher Street Maintenance Yard (3311 Thatcher Avenue) and scattered across the former Wastewater Collection Systems Division Training Facility (3233 Thatcher Avenue), respectively.

The Quaternary alluvium underlying or possibly remaining alongside deposits of artificial fill has the greatest potential to contain preserved tribal cultural resources. This does not rule out the possibility that Native American artifacts could occur within the artificial fill, but any such deposits would, by definition, have been separated from their original context and may be less likely to meet the significance criteria to be considered tribal cultural resources. Therefore, in general, tribal cultural resources preservation potential within the Project site is considered highest within naturally occurring alluvial sediments.

Sensitivity Conclusion

Based on the general location of the Project site near the former Ballona wetland and near a former Late Prehistoric Native American archaeological site, the sensitivity for tribal cultural resources is considered high. However, the sensitivity is reduced in areas where Historic-period disturbances (represented by deposits of artificial fill) have been identified and mapped within the Project site. The three sensitivity zones—high, moderate, low—were mapped and are shown here in Figure 21.

Available evidence shows that a large pit was excavated within the southern portion of the site and included substantial subsurface disturbance. In this area the resulting sensitivity is considered to be low. The remainder of the site was subject to at least some form of disturbance, resulting in reduced sensitivity within the near surface, which occurred mainly in the central and northern portions of the Project site. In these areas the sensitivity is considered to be moderate. In the southernmost portion of the Project site, in the area between the large trash pit and the property line represented by the former railroad ROW, historical aerials suggest that limited subsurface disturbances occurred in the years leading to the entire Project site being paved. No buildings were constructed here and the presence of the railroad seems to have restricted vehicle travel or other activities that might have otherwise contributed to subsurface disturbances. Archaeological excavations at CA-LAN-47 in 1989 found substantial archaeological deposits in the railroad ROW (see Figure B-3 and Figure B-4), suggesting that similar settings should be considered to have relatively higher

preservation potential. Based on these considerations, the southernmost portions of the Project site are considered to have high sensitivity for tribal cultural resources.

RECOMMENDATIONS

Mitigation Measures

Without some form of subsurface archaeological testing or inspection, the presence or precise location of any such resources below the developed surface is unknown and generally unpredictable. Impacts to such resources, if present, are generally evaluated as potentially significant unless mitigated. This potential is derived from the possibility of Project-related ground disturbance encountering and damaging previously undocumented resources. The tribal cultural resources possibly present but as yet undiscovered in the Project site are assessed as being potentially significant, but their potential uniqueness or integrity cannot be determined under CEQA prior to their discovery.

The proposed Project has the potential to disturb human remains, including those interred outside of formal cemeteries. Human remains were identified in archaeological site CA-LAN-47, located approximately 830 feet from the Project site, which were most recently observed in the form of isolated bone fragments found in the former railroad ROW. Evidence for a formal or central cemetery has not been identified in previous archaeological investigations, and available evidence does not suggest one exists within the Project site. Nevertheless, the possibility exists that human remains could be found on the Project site during ground disturbance.

Based on the above considerations, SWCA finds that the proposed Project could result in significant impacts to tribal cultural resources and recommends mitigation measures. Because the tribal cultural resources identified as having the highest potential are archaeological in nature, measures for the treatment of archaeological resources are also considered. The mitigation measures recommended here have been developed in accordance with, and incorporate the performance standards of, the Secretary of the Interior's Standards for professional archaeology, PRC Section 5024.1, Title 14 CCR, Sections 15064.5 and 15126.4 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1, Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*, and the guidelines of the City of Los Angeles General Plan Conservation Element.

MM TCR-1 Tribal Cultural Resources Presence/Absence Testing. Prior to the commencement of Project ground disturbance, a qualified archaeologist shall devise and execute a plan to test portions of the Project site for the presence or absence of buried tribal cultural resources (Testing Plan). Testing methods shall be established in consultation with the Project applicant, Native American representative from the Gabrielino Tongva Indians of California Tribal Council, appropriate agencies, and Project engineers/architects. These methods may include hand excavation and/or mechanical excavation. The testing may include the presence of a Native American representative from the Gabrielino Tongva Indians of California Tribal Council. The Testing Plan shall be prepared in compliance with applicable state and local regulations for tribal cultural resources and shall be submitted to the City of Los Angeles for review and approval no fewer than 15 days before ground-disturbing Project activities commence. The Testing Plan shall also include a description of a Worker Training Protocol and Program (described in **MM TCR-2**), methods for treatment of tribal cultural resources should they be discovered, a communications protocol, methods for reporting, and identification of a curation facility should artifacts be collected.

In the event that potential tribal cultural resources are present, the resources shall be documented and their significance shall be evaluated through appropriate means, as

determined by a qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not possible, data recovery or other means of mitigation shall be conducted to reduce potential impacts to less than significant. The results of this evaluation and data recovery shall be documented in a technical report that shall be submitted to the City of Los Angeles in a reasonable time after the last day of archaeological fieldwork. If the expected time required to complete the report exceeds one year, a preliminary memo summarizing the findings shall be submitted 4 weeks after the last day of archaeological fieldwork. The memo shall summarize the activities undertaken, preliminary results, and the expected time for submittal.

In the event that the results of testing are negative, no further fieldwork shall be required unless identified by the qualified archaeologist or representative from the Gabrielino Tongva Indians of California Tribal Council and supported by substantial evidence. Negative testing results shall be documented in a technical report that shall be submitted to the City of Los Angeles no more than 90 days after the last day of archaeological fieldwork.

Additional work includes but is not limited to preparing and executing a Tribal Cultural Resources Monitoring Plan.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the Secretary of the Interior (SOI) Professional Qualifications Standards (PQS) for archaeology.

MM TCR-2 Worker Training. Prior to the commencement of Project ground disturbance, a qualified archaeologist shall present a Tribal Cultural Resources Worker Training Protocol and Program to Project construction personnel. The training may be presented at the pre-grade meeting, and it shall include detailed procedures for the identification and recovery of significant cultural resources. The archaeologist shall inform Project personnel about the types of resources that could be encountered and procedures to follow in the event of a discovery, as well as the potential penalties for failing to adhere to applicable laws and regulations.

All recommended measures shall be undertaken under the direction of a qualified archaeologist. A qualified archaeologist is defined as an archaeologist meeting the SOI PQS for archaeology.

MM TCR-3 Unanticipated Discovery of Tribal Cultural Resources. In the event potential tribal cultural resources are exposed during construction, work in the immediate vicinity of the find (within 25 feet [8 m]) shall stop until a qualified archaeologist can evaluate the significance of the find, in accordance with the Testing Plan. Construction activities may continue in other areas as directed by the qualified archaeologist. If the discovery proves significant under CEQA and resource avoidance is not feasible, data recovery shall be conducted to reduce potential impacts to less than significant.

The results of the significance evaluation and data recovery that has been undertaken, shall be documented in a technical report that shall be submitted to the City of Los Angeles within 12 months of the last day of archaeological fieldwork. Recovered materials that are considered to be significant by the qualified archaeologist shall be curated at an appropriate facility that will ensure their long-term preservation and will allow access for interested scholars. All recommended measures shall be undertaken under the direction of a qualified

archaeologist. A qualified archaeologist is defined as an archaeologist meeting the SOI PQS for archaeology.

MM TCR-4 Unanticipated Discovery of Human Remains. In the event of the unanticipated discovery of human remains, work in the immediate vicinity of the find (within 25 feet [8 m]) shall stop and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State of CHSC Section 7050.5 and PRC Section 5097.98. The County Coroner shall be notified of the find immediately. If the human remains are determined to be Native American or “ancient,” the County Coroner shall notify the NAHC, which will designate and notify a Native American MLD. The MLD shall complete the inspection of the site within 48 hours of notification and make recommendations regarding the treatment and disposition of human remains and items associated with Native American burials.

CONCLUSION

The CHRIS records search did not identify any known tribal cultural resources in the Project site. An SLF search returned by the NAHC was positive. Available evidence suggests that the potential exists for unrecorded tribal cultural resources in the form of buried features or artifacts, and possibly Native American burials. The likelihood of tribal cultural resource presence within the Project site was mapped as areas of high, moderate, and low sensitivity. The sensitivity assessment considered Native American settlement patterns within the Ballona area, proximity to closest known sites, and historical impacts to the physical setting. The sensitivity for tribal cultural resources is highest along the southernmost portion of the Project site and within naturally occurring alluvial sediments found below deposits of artificial fill, which otherwise characterize large portions of the Project site. Therefore, the potential for impacts to tribal cultural resources exists only in those places where the proposed Project activities are likely to encounter alluvial sediments. Conversely, where proposed ground disturbances are proposed to occur exclusively within artificial fill, any tribal cultural resources that might be present in the underlying alluvium would remain preserved, and Project-related impacts would be avoided.

The Project proposes to construct a new housing development, which requires removal of all paved surfaces within the Project site and excavation for a basement level. Excavation for the basement level is expected to extend 4 feet below grade within a 32,925-square-foot area (0.76 acre) measuring 458 by 72 feet. The footprint of the basement level includes areas mapped as low, moderate, and high sensitivity for tribal cultural resources. The high and moderate areas are the most likely to contain underlying alluvial sediments in which tribal cultural resources could occur. Should the need for excavation or grading be required in any areas outside the basement level, the potential for impacts to tribal cultural resources would apply in the same manner. Excavation within the low sensitivity zone is expected only occur within artificial fill. Within the remainder of the Project site, the pavement removal is only expected to occur result in disturbances to the near surface, which appears to be primarily characterized by artificial fill.

SWCA recommends implementing mitigation measures **MM TCR-1** through **MM TCR-4**, which include presence/absence testing, conducting worker training, and following protocols for the unanticipated discovery of tribal cultural resources and human remains. With implementation of these mitigation measures, potential impacts on tribal cultural resources would be less than significant.

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Appendix A
Report Figures



Figure 1. Project vicinity.

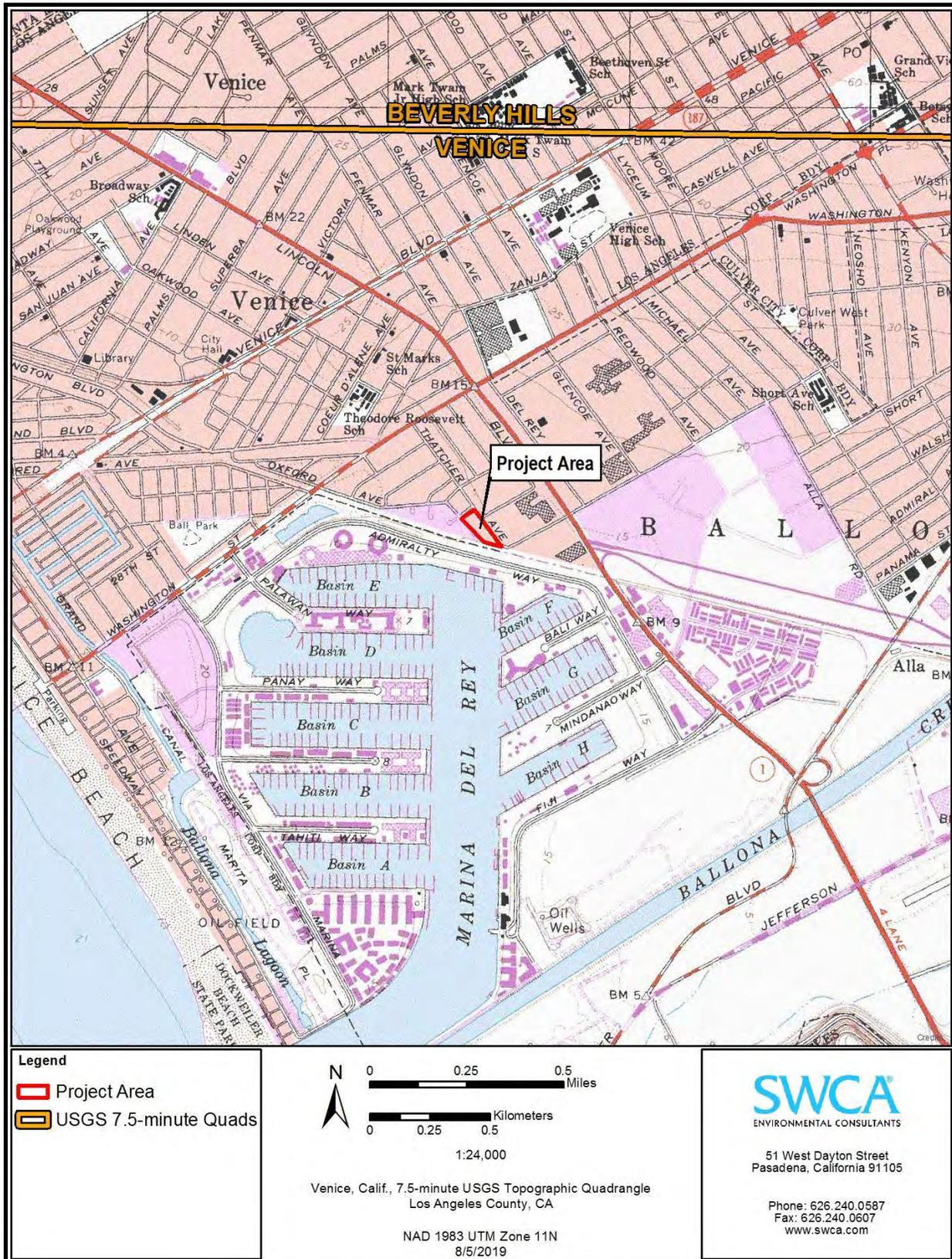


Figure 2. Project site plotted on Venice, California, U.S. Geological Survey 7.5-minute topographic quadrangle.



Figure 3. Project location map.

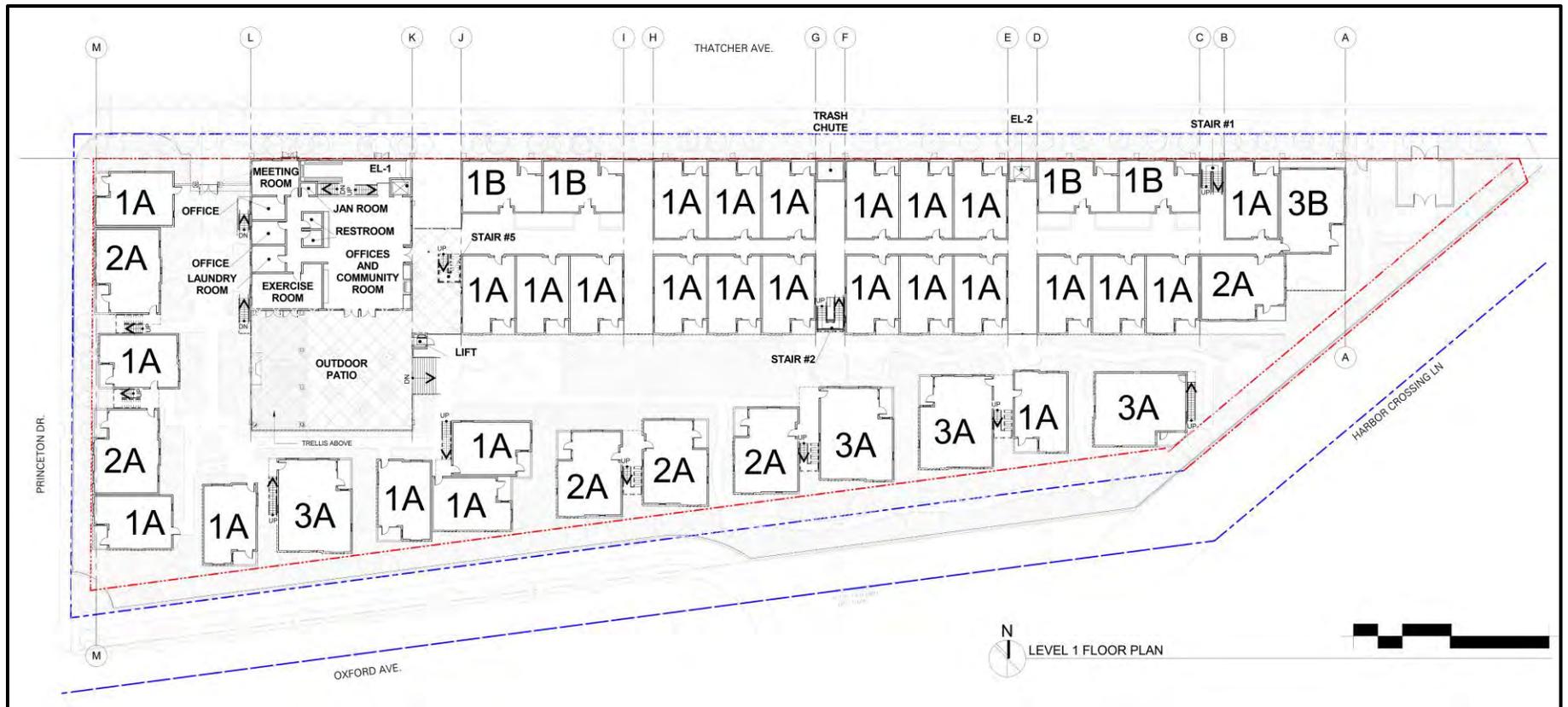


Figure 4. Floor plans for Level 1 of Thatcher Yard Project development.

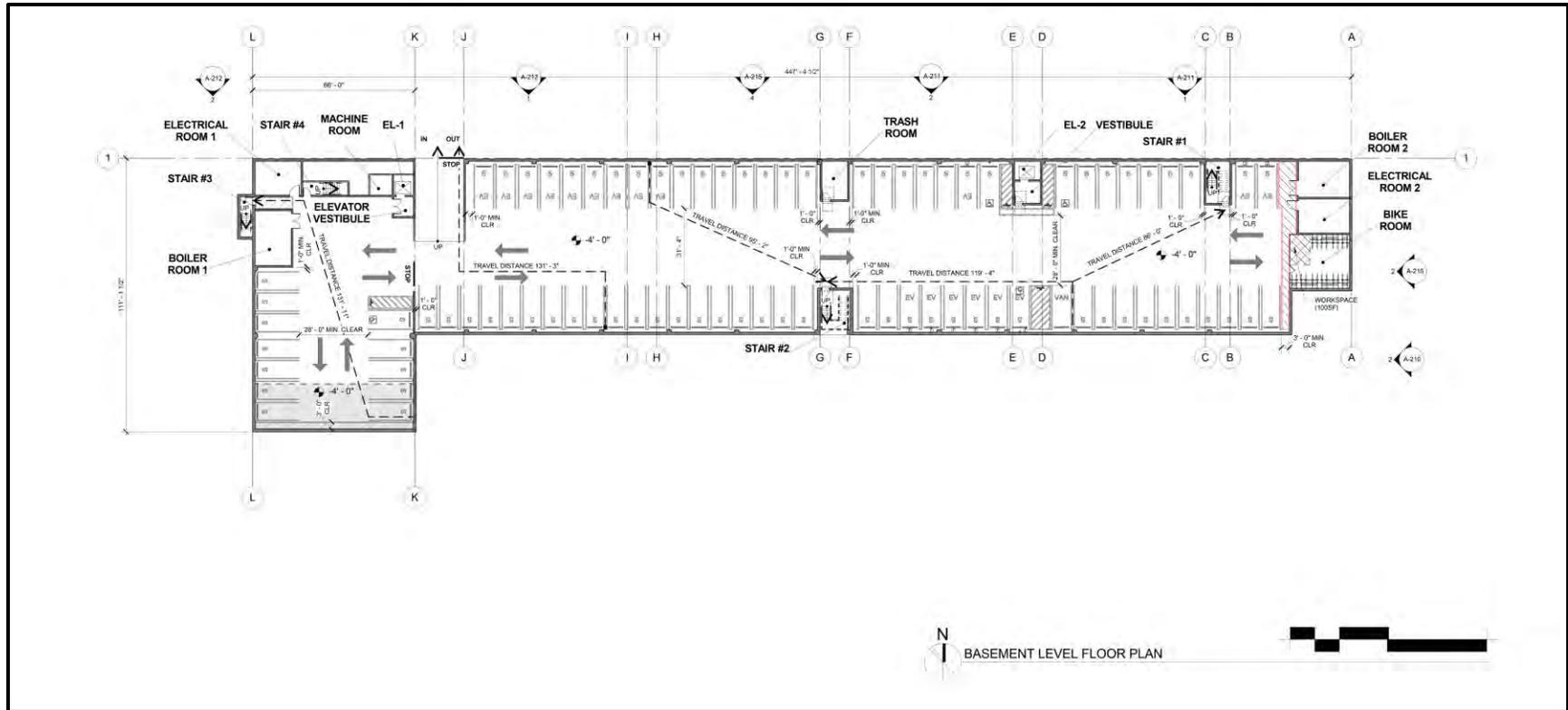


Figure 5. Floor plans for basement level of Thatcher Yard Project development.

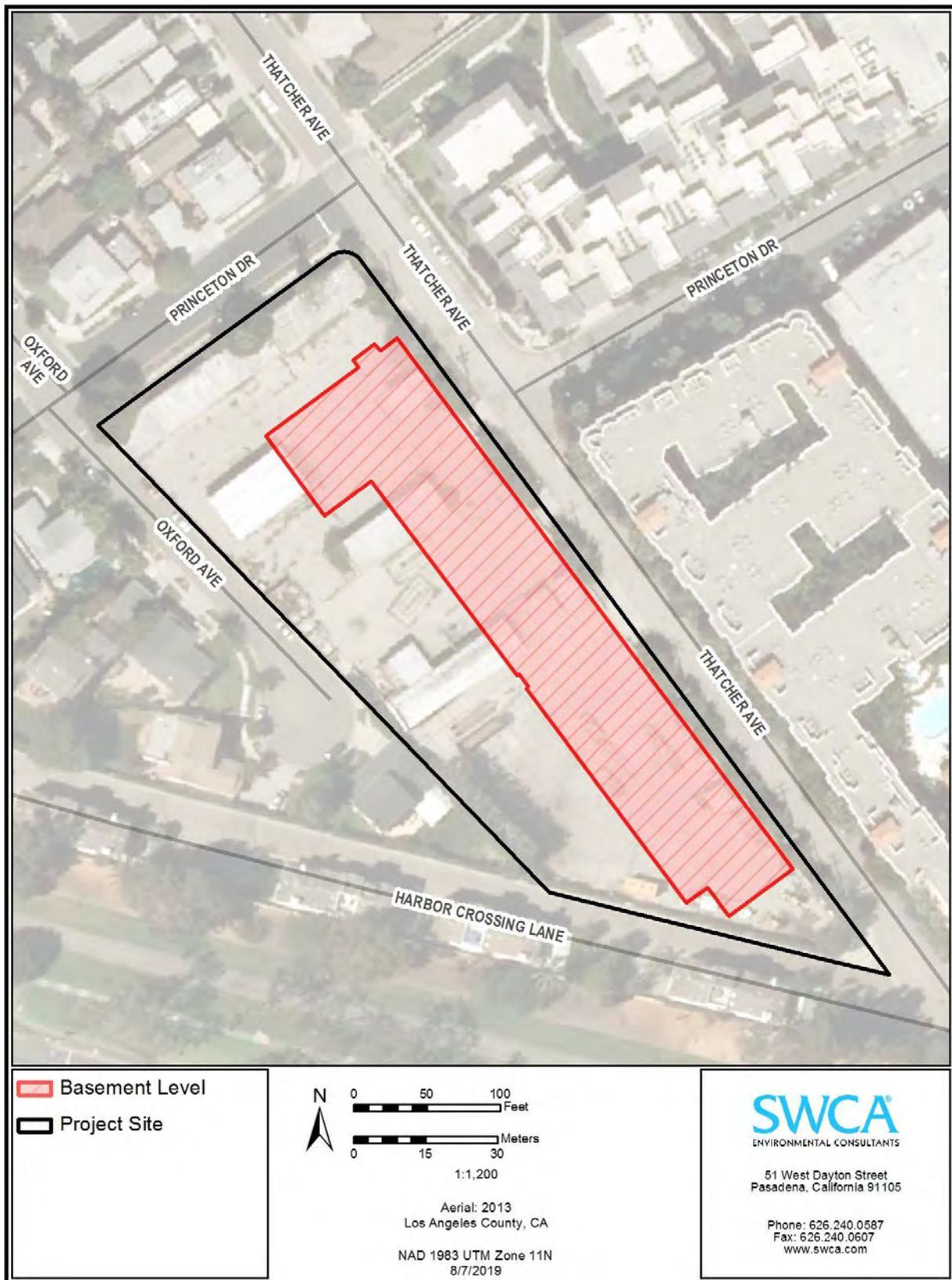


Figure 6. Footprint of the proposed basement level within the Thatcher Yard Project site.

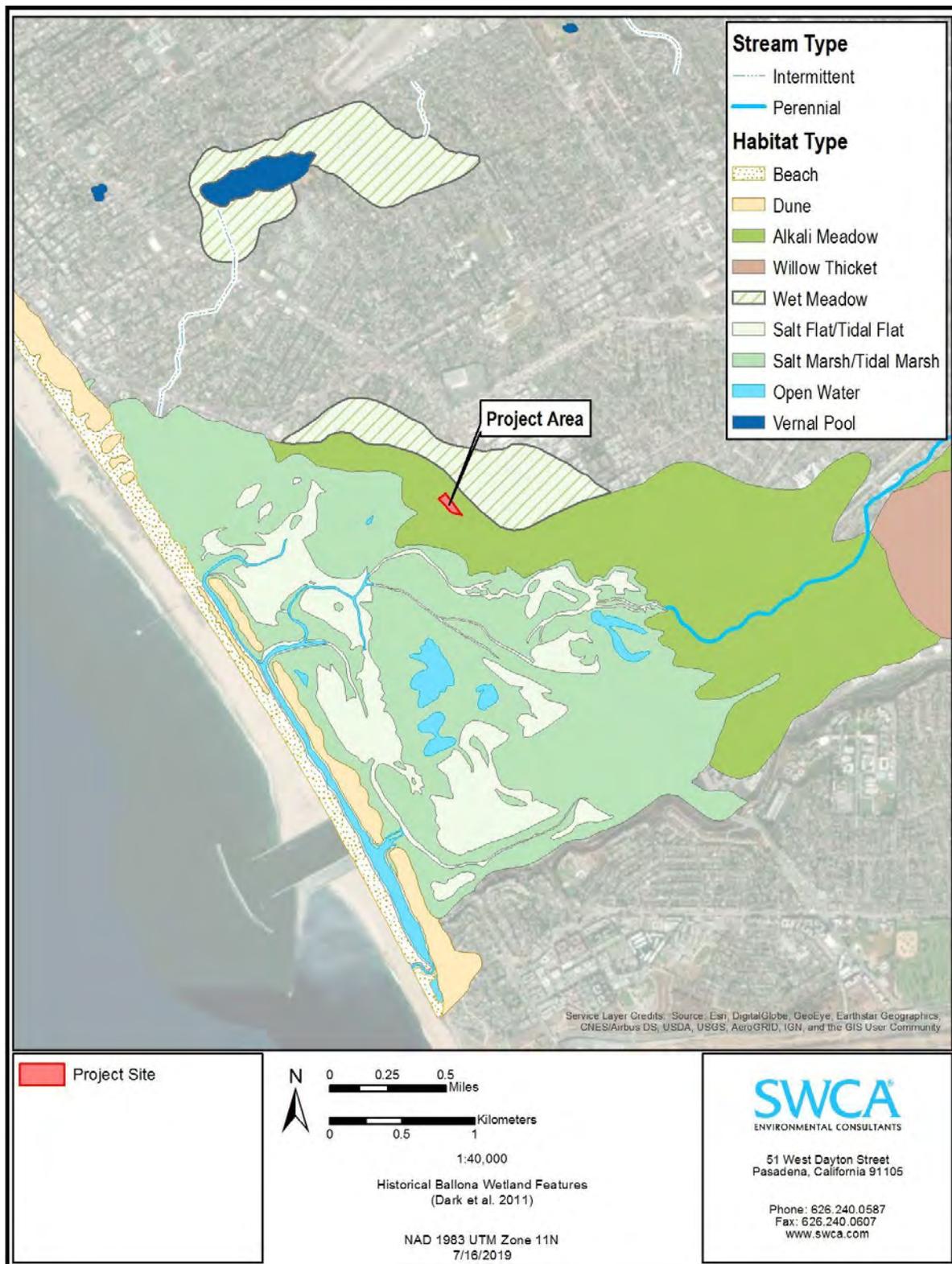


Figure 7. Historical reconstruction of Ballona wetlands by Dark et al. (2011) superimposed on a 2018 aerial photograph showing the Thatcher Yard Project site situated in alkali meadow. The salt marsh/tidal marsh is mapped as marsh in Homburg and colleagues' (2014:105) reconstruction in the next figure.

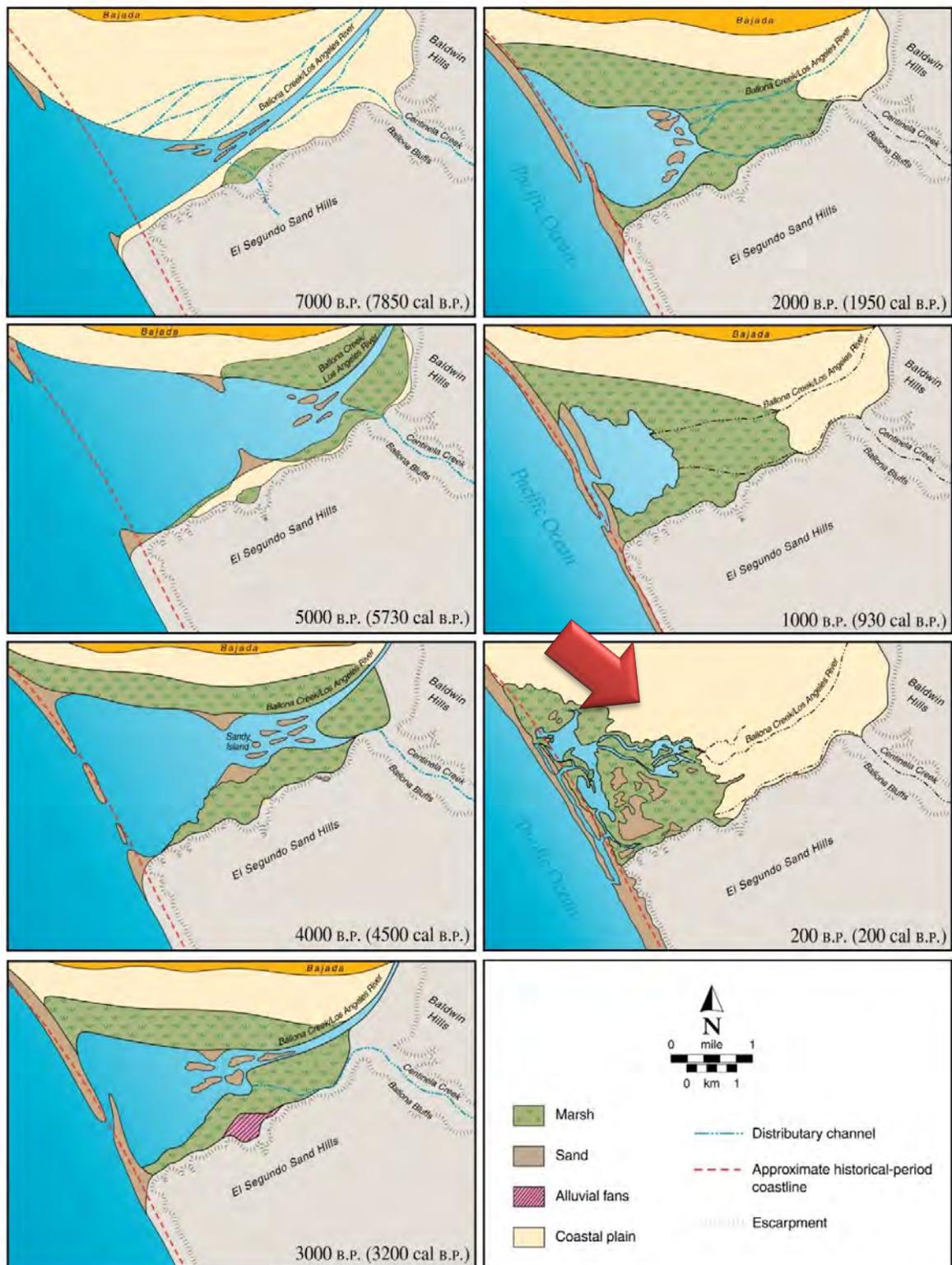


Figure 8. Historical formation of the Ballona Lagoon (top to bottom, then left to right) based on a reconstruction by Homburg and colleagues (2014:105). In the frame depicting conditions in 200 years before present, the Thatcher Yard Project site would have been located within the coastal plain, just outside the marsh on the north-central portion of the wetland (red arrow); compare this frame to the historical ecological reconstruction in the previous figure.

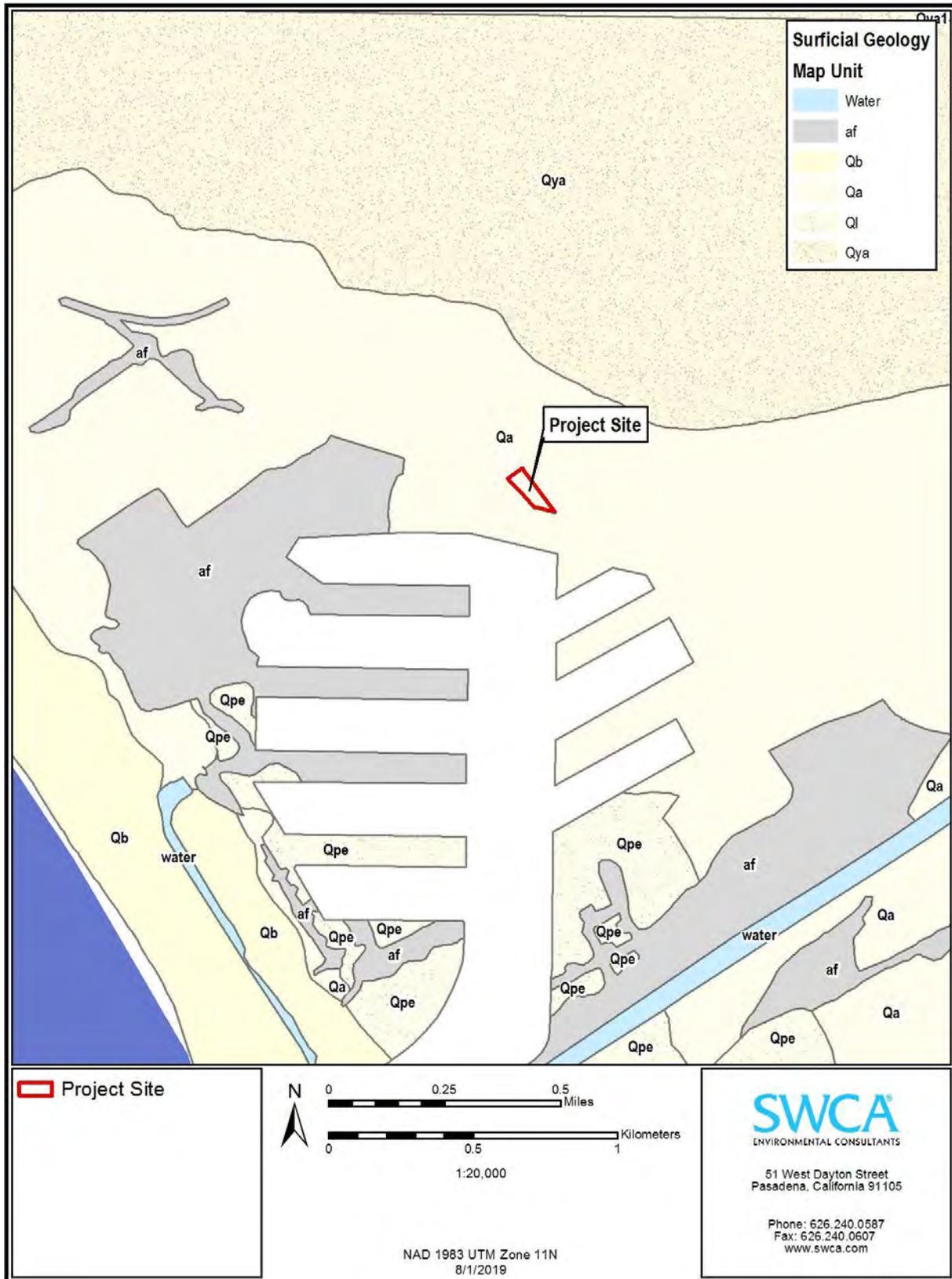


Figure 9. Surficial geology surrounding Thatcher Yard Project site from Bedrossian and Roffers (2012).

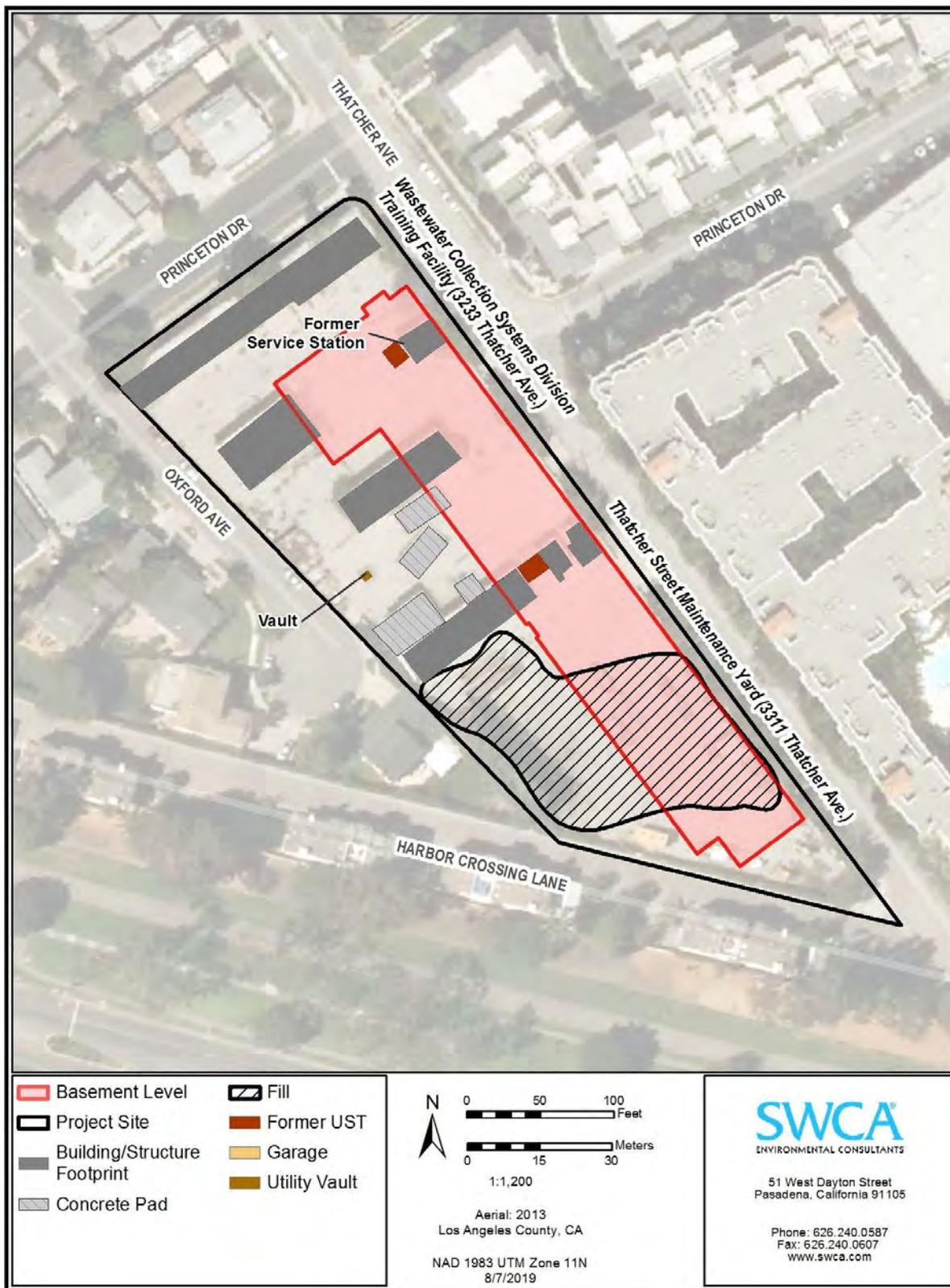


Figure 10. Indicators of surface and subsurface disturbance identified in the Thatcher Yard Project site. The fill (cross-hatching) is taken from a 2001 report by URS; other features taken from a 2002 Phase II report by California Environmental (Buckley and Rude 2002).

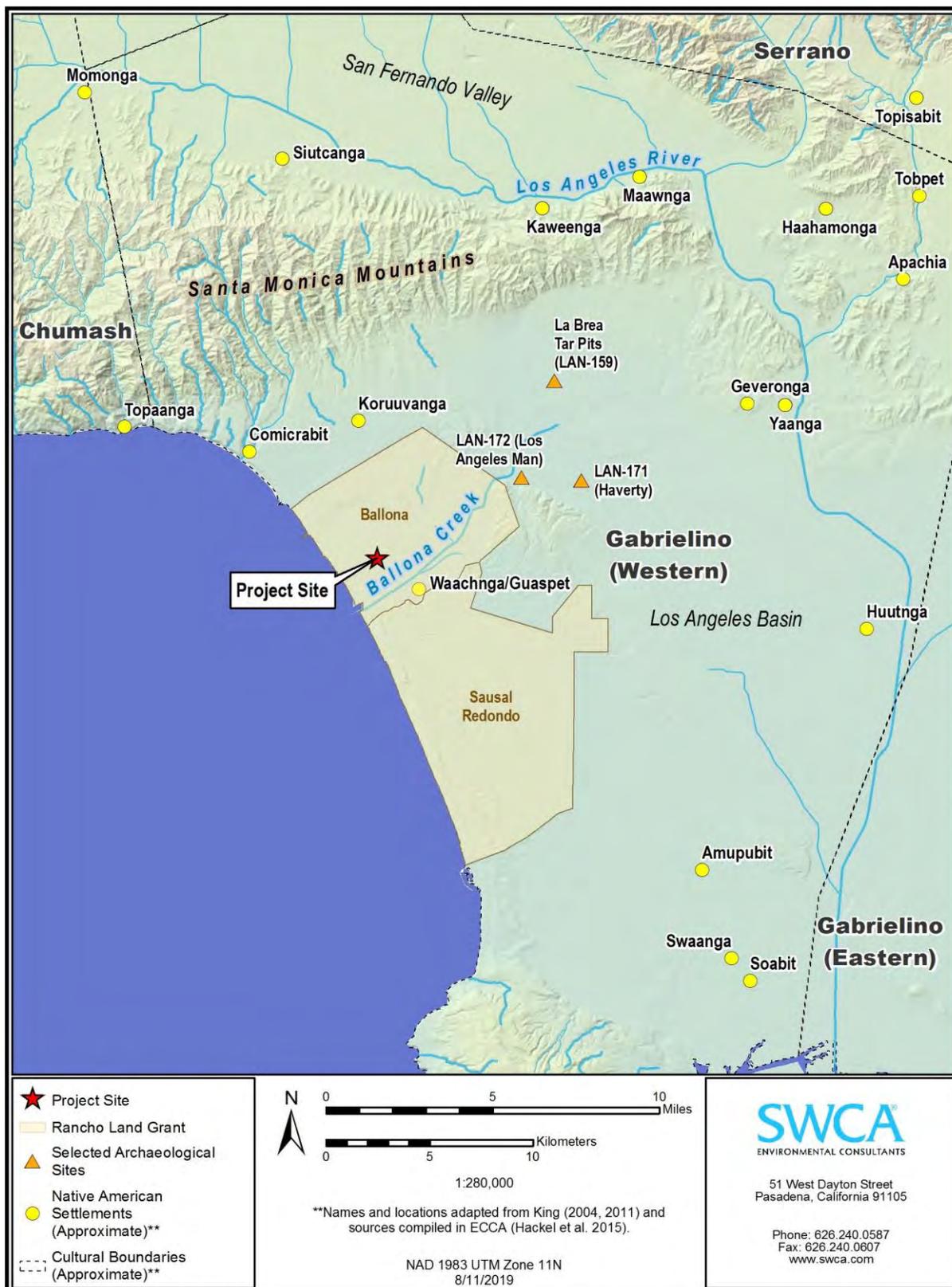


Figure 11. Native American territorial boundaries and place names and selected archaeological sites (Sources: King 2004, 2011; Hackel et al. 2015).



Figure 12. The name “Guacho” appears (right) in this detailed view of a map drawn of Rancho del Paso de las Carretas (literally Wagon Pass, later renamed Rancho Ballona), reproduced from the original diseño, ca. 1840s. (Source: University of California, Berkeley, Bancroft Public Library.)

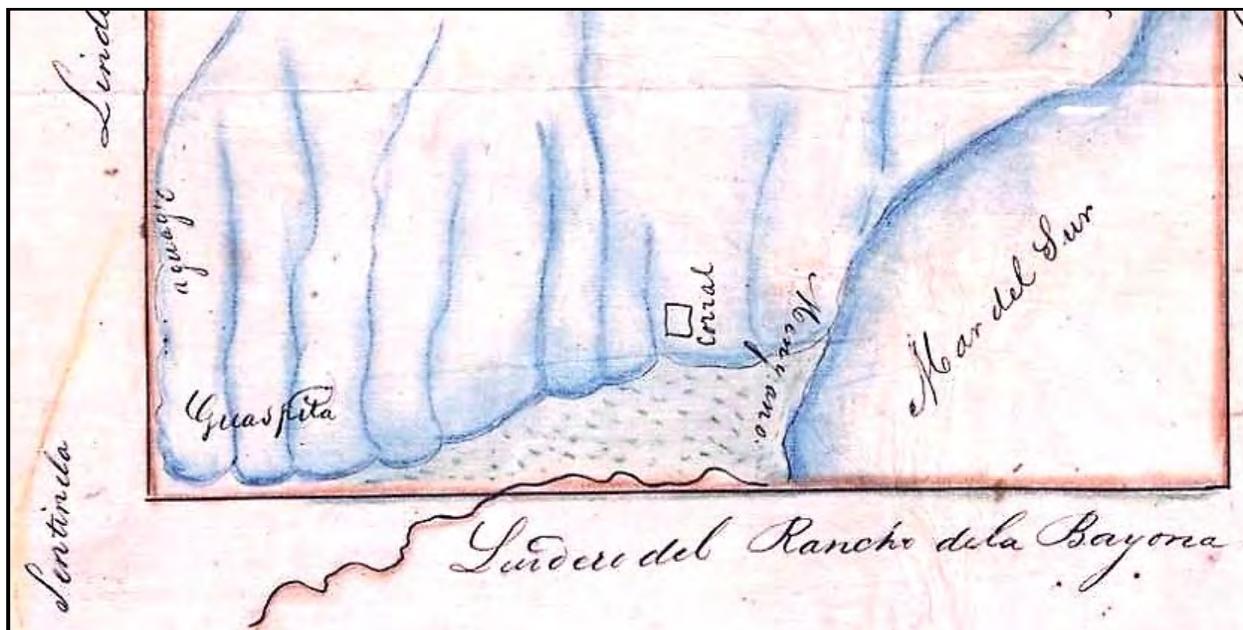


Figure 13. The name “Guaspita” appears (left) in this detailed view of a map drawn of Rancho Sausal Redondo, reproduced from the original diseño, ca. 1840s. Note that map is oriented to the east (top). (Source: University of California, Berkeley, Bancroft Public Library.)

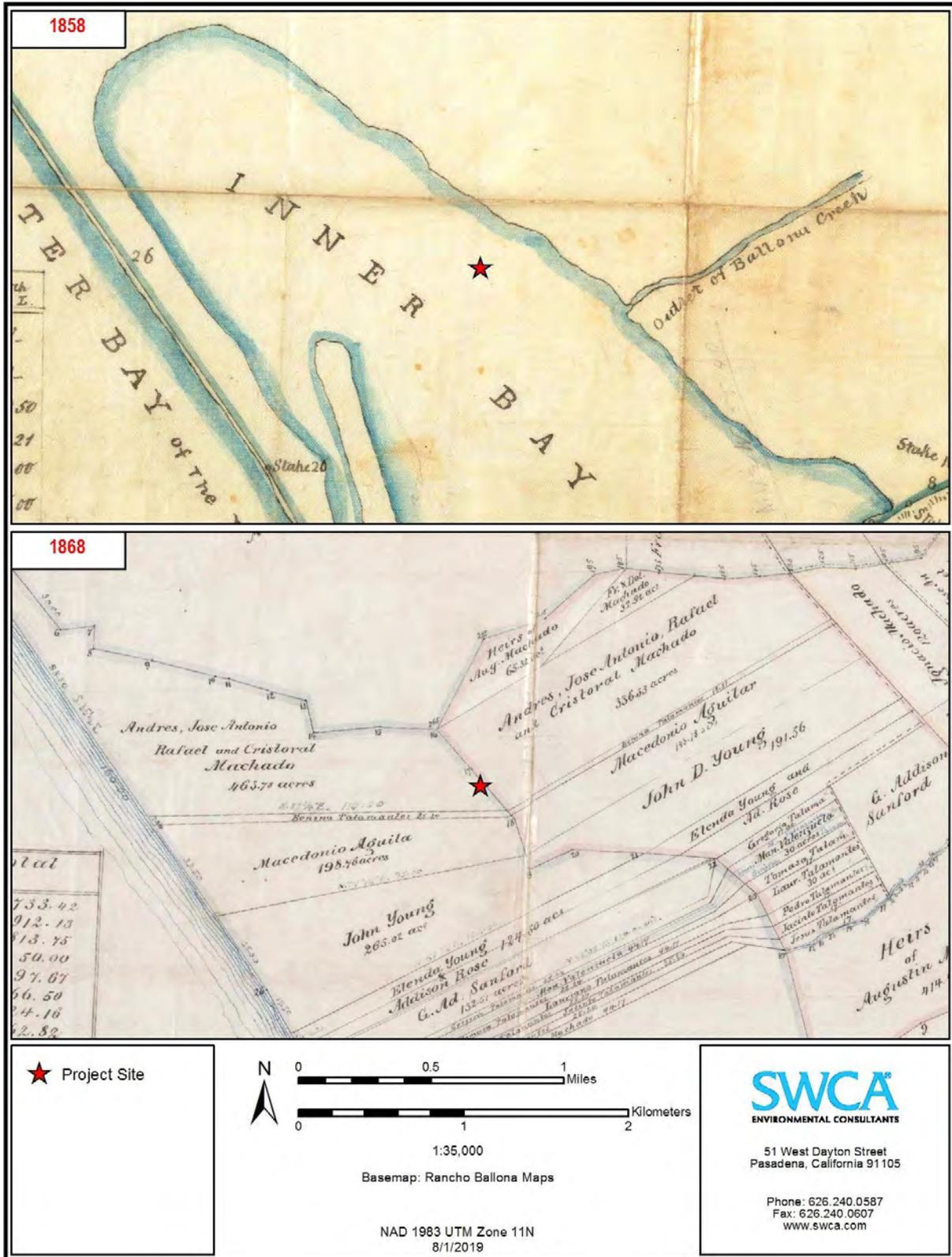


Figure 14. Thatcher Yard Project site plotted on two maps drawn in 1858 and 1868 of Ballona Rancho. (Source: Huntington Library, Solano-Reeve Collection, Unique Digital Identifiers 20895 and 20894.)

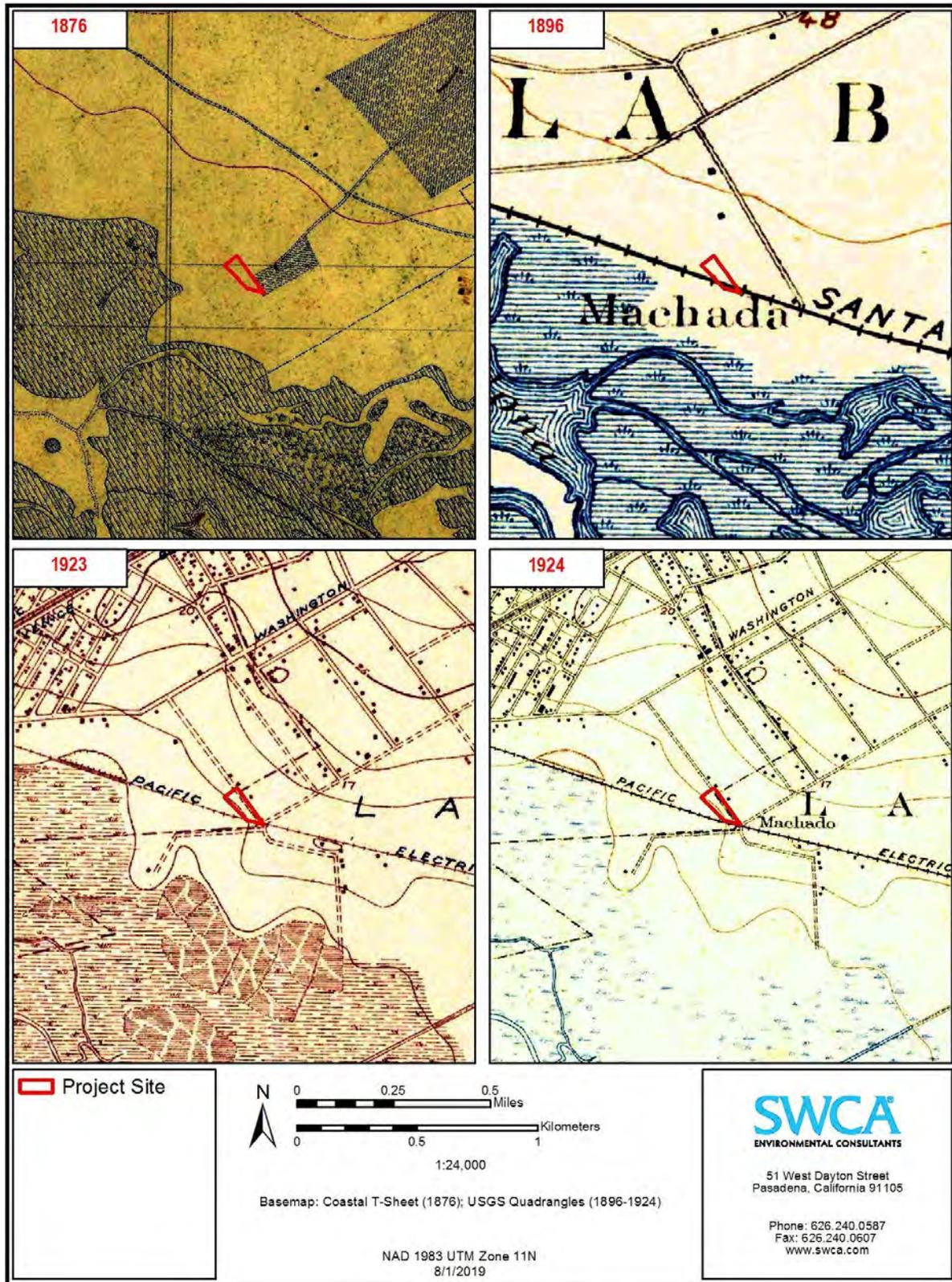


Figure 15. Thatcher Yard Project site plotted on an 1876 coastal survey map (T-sheet) and U.S. Geological Survey quadrangles from 1894, 1923, and 1924.

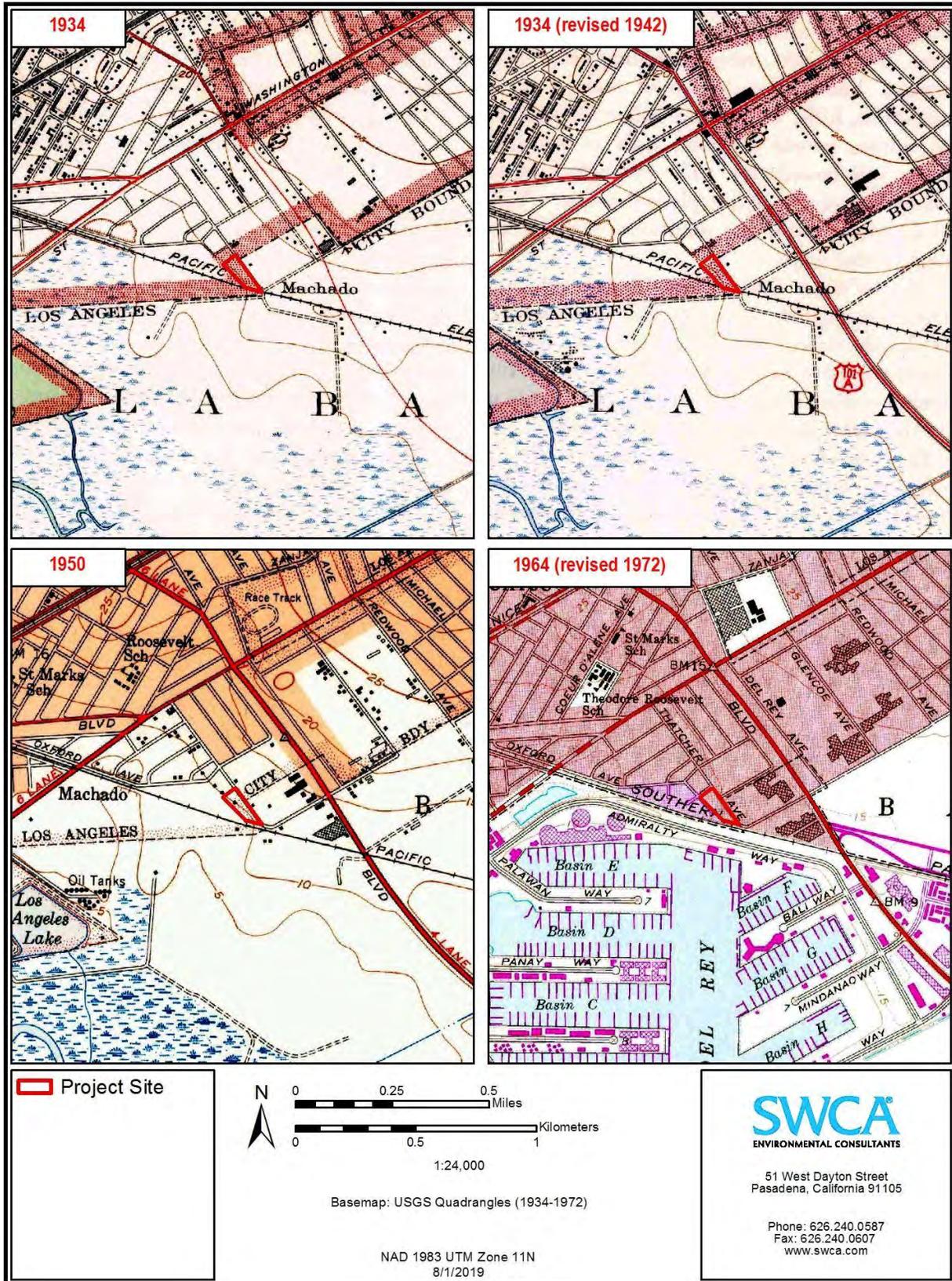


Figure 16. Thatcher Yard Project site plotted on U.S. Geological Survey quadrangles from 1934, 1934 (photorevised 1942), 1950, and 1964 (photorevised 1972).

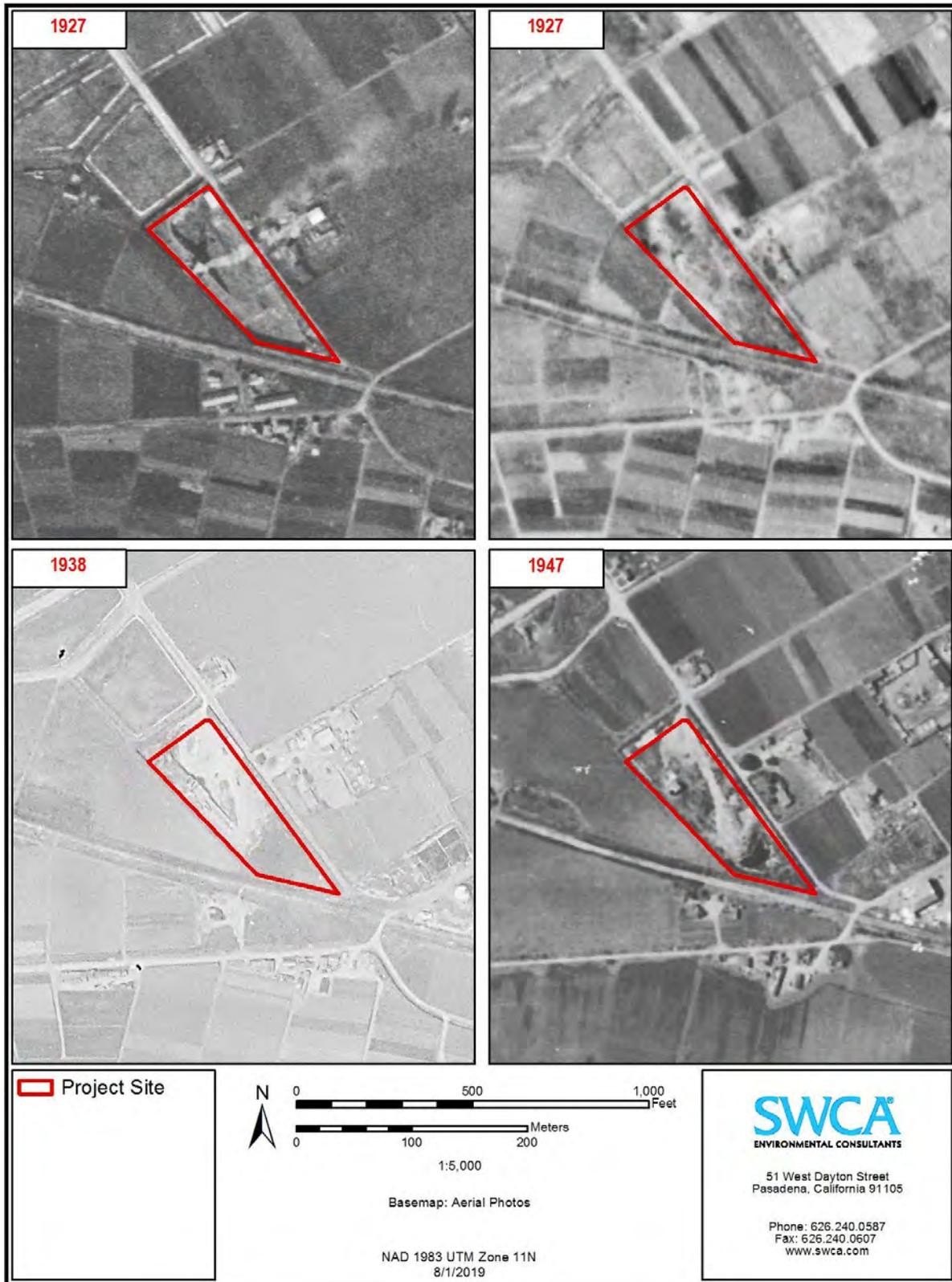


Figure 17. Thatcher Yard Project site plotted on aerial photographs from 1927, 1938, and 1947.

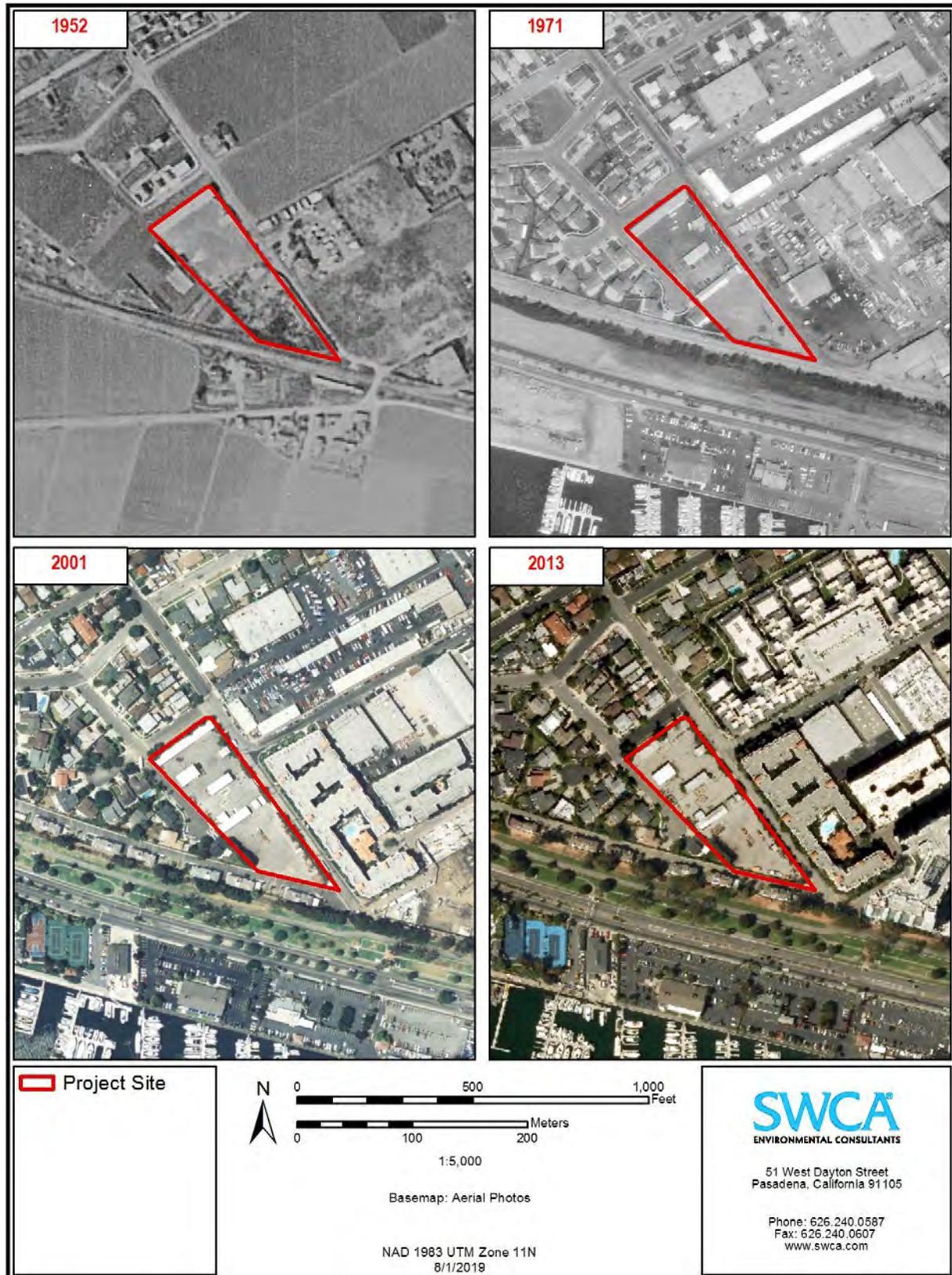


Figure 18. Thatcher Yard Project site plotted on aerial photographs from 1952, 1971, 2001, and 2013.

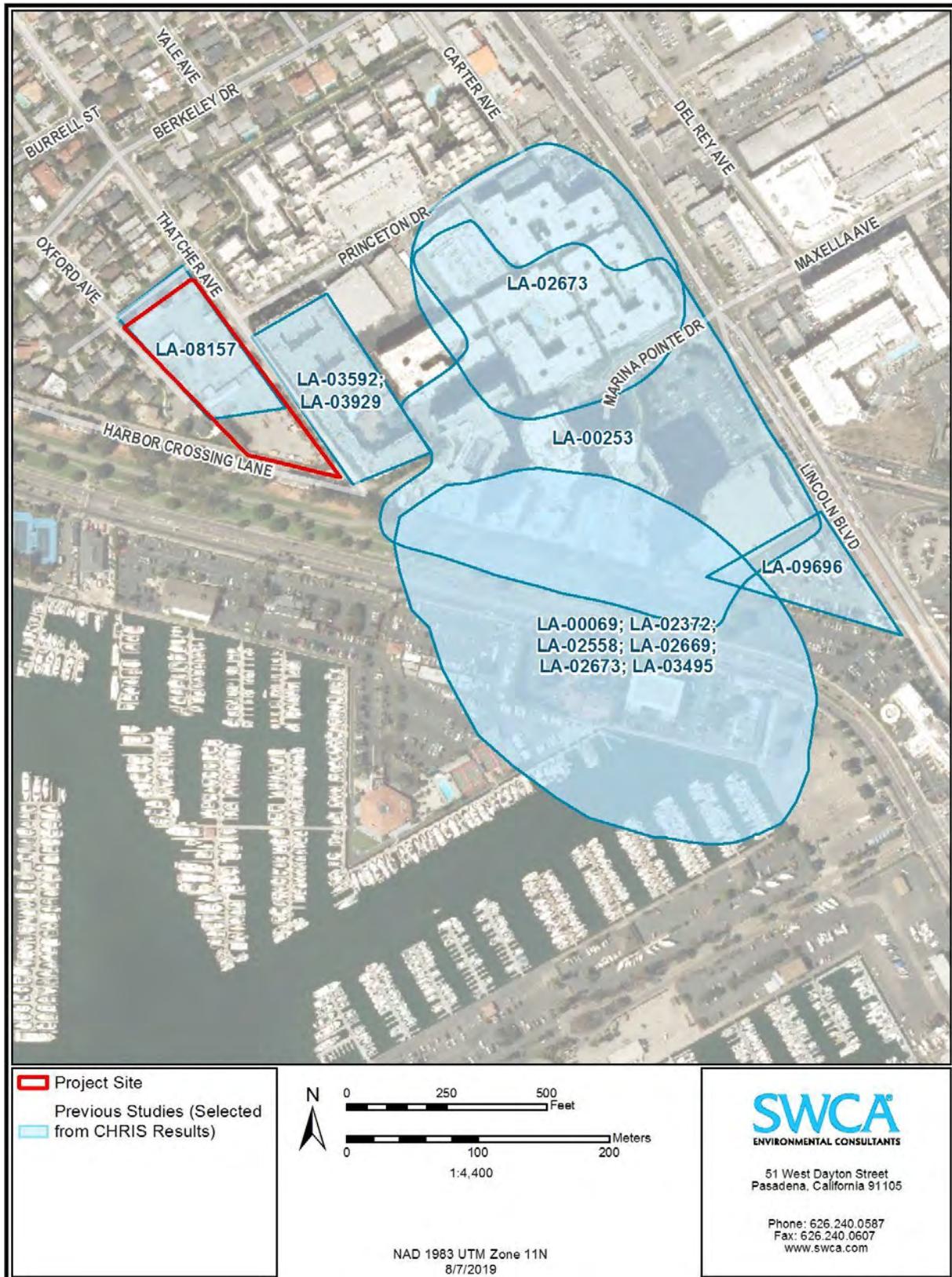


Figure 19. California Historical Resources Information System records search results, showing previous studies conducted near the Project site.

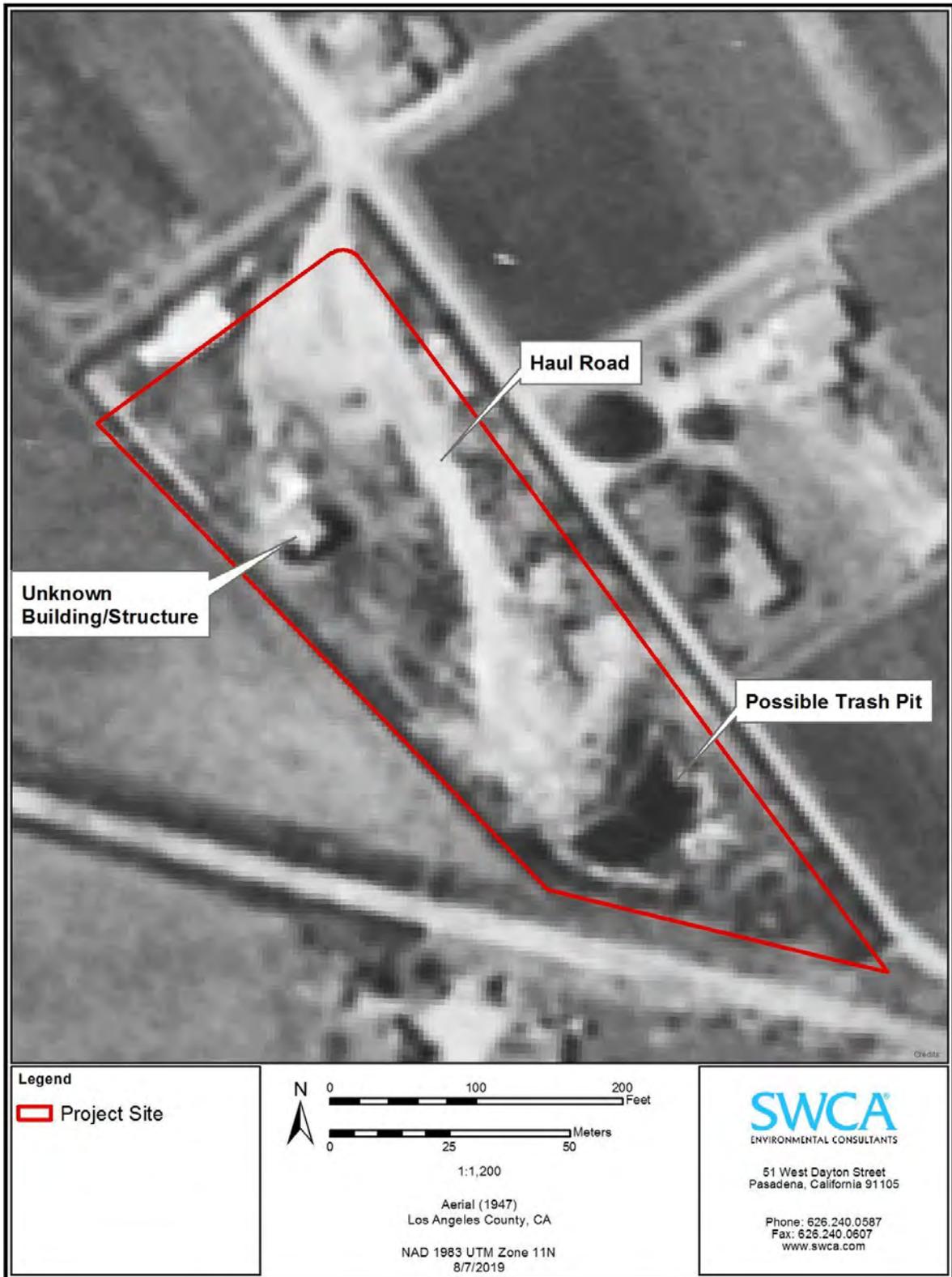


Figure 20. Detailed view of the Thatcher Yard Project site plotted on a 1947 aerial photograph.

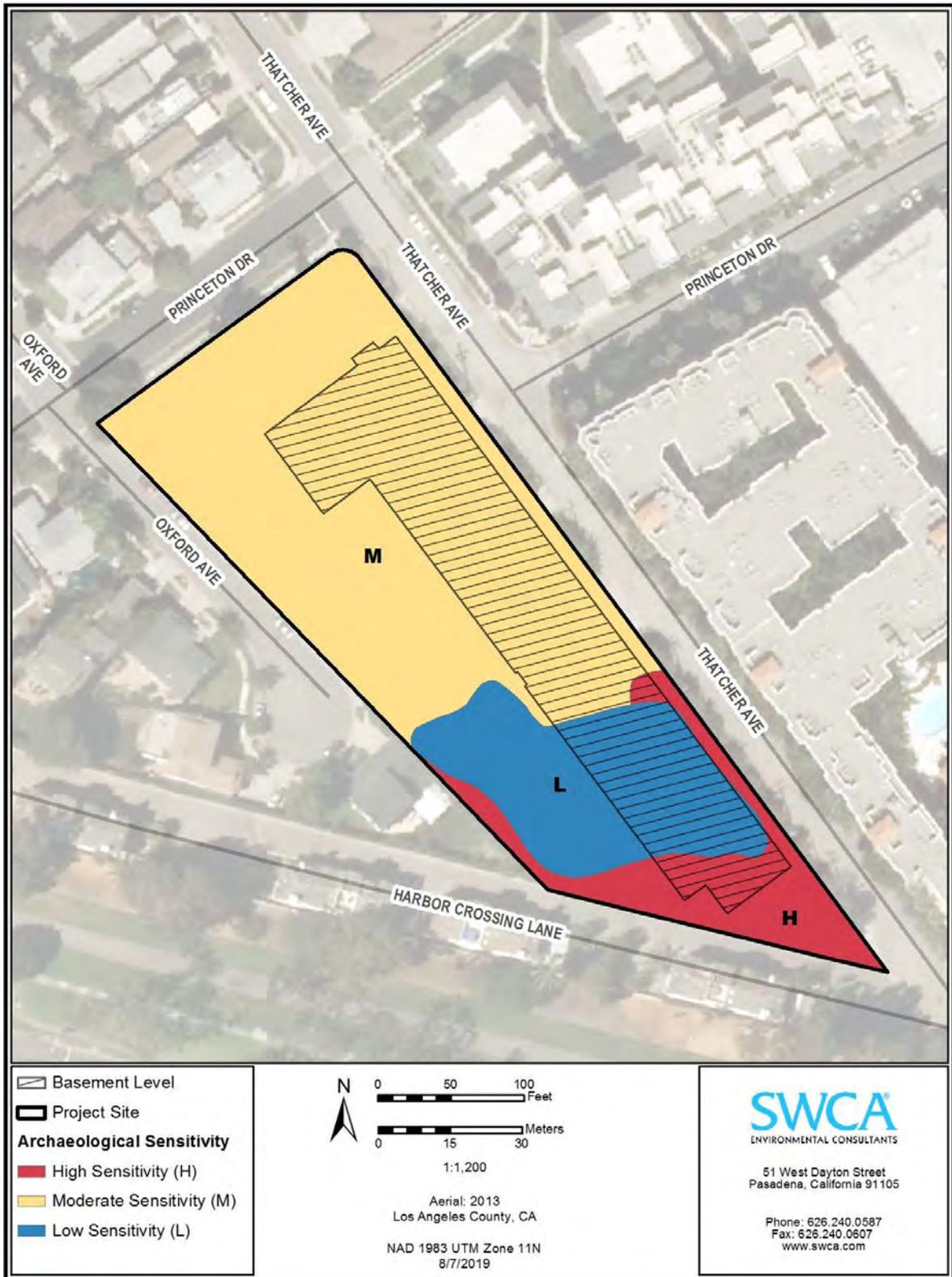


Figure 21. Sensitivity zones—high (H), moderate (M), and low (L)—for buried Native American archaeological resources within the Thatcher Yard Project site.

Appendix B

Confidential Report Figures

[CONFIDENTIAL – NOT FOR PUBLIC DISTRIBUTION]

Archaeological resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This appendix contains sensitive information regarding the nature and location of archaeological sites, which should not be disclosed to the general public or unauthorized persons and are exempt from public disclosure pursuant to the Public Records Act (California Code of Regulations Section 15120[d]).

Appendix C

Native American Heritage Commission Sacred Lands File Search Results Letter

**Native American Heritage Commission
Native American Contact List
Los Angeles County
5/15/2019**

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Gabrielino

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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.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Thatcher Yard Project, Los Angeles County.