DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	204219-10
Document Title:	4.3 Cultural Resources
Description:	N/A
Filer:	Sabrina Savala
Organization:	NRG Oxnard Energy Center, LLC
Submitter Role:	Applicant
Submission Date:	4/16/2015 10:44:09 AM
Docketed Date:	4/15/2015

4.3 CULTURAL RESOURCES

Cultural resources are defined as buildings, sites, areas, places, structures, objects, or traditional cultural properties, each of which may have historical, architectural, archaeological, cultural, or scientific importance.

This section describes cultural resources at the Puente Power Project (P3 or project) site and in the vicinity of P3, and evaluates potential impacts of the project to these resources. The project area discussed in this section refers to all areas of temporary and permanent disturbance associated with the construction and operation of the new plant and ancillary systems, and construction laydown areas. No new offsite linear facilities are required for P3.

The sections below provide an overview of the affected environment; an evaluation of the environmental consequences of the proposed project to cultural resources; a cumulative impact analysis; identification of mitigation measures that will avoid and reduce project impacts to less-than-significant levels; and applicable laws, ordinances, regulations, and standards (LORS).

Archaeological resources are discussed in further detail in the technical report (AECOM, 2015a), which is attached in Appendix E-1. Built environment resources are discussed in further detail in the technical report (AECOM, 2015b), which is attached in Appendix E-2.

4.3.1 Affected Environment

As detailed in Section 4.3.1.6 (Resources Inventory), the cultural resources inventory efforts completed for the project included a literature review and records search, archival research, review of collected data, consultations with the Native American Heritage Commission (NAHC), contact with all groups and individuals identified by the NAHC, and pedestrian surveys. A literature review and record search for cultural resources within a 1-mile radius of the site is mandated by the California Energy Commission (CEC) (CEC, 2008:398). This was completed for the P3 site by staff from the Southern Central Coast Information Center (SCCIC) on January 5, 2015 (Records Search #14648), and was supplemented by additional archival research. Consultation was carried out with the State of California's NAHC, and through subsequent contact with all Native American groups and individuals identified by the NAHC. Pedestrian surveys were performed for both archaeological and historic architectural resources of each cultural resource sub-discipline's Project Area of Analysis (PAA).

As depicted on Figure 4.3-1, the PAA—as defined for archaeological resources—consists of the project areas where ground-disturbing activities would occur, and includes the CEC-mandated buffer of 200 feet around the project site and staging areas (CEC, 2008:398).

The vertical extent of the archaeological PAA must be considered for the project. Below is listed the maximum excavation depth in feet below ground surface (bgs) for the following project components:

- 7 feet bgs for P3 turbine block;
- 5 feet bgs for the reminder of P3 foundations;
- 5 feet bgs for transmission poles; and
- 4 feet bgs for all requisite piping.

In addition to these excavations, piles will be driven to support the foundation for the turbine block to a depth of 70 feet bgs. Because the existing soils are comprised of sand and groundwater occurs at between 5 to 9 feet bgs, no predrilling for the pile installation is proposed. Instead, the piles will be driven to their maximum depth.

As depicted on Figure 4.3-2, the PAA as defined for historic architectural (built environment) resources also consists of the project site, and includes the CEC-mandated buffer for projects in rural settings of no less than 0.5 mile out from the proposed plant site and not less than 0.25 mile on each side of above-ground linear facilities (CEC, 2008:398). The larger architectural PAA followed the guidelines established by the CEC for rural projects to address potential indirect effects, as well as direct effects to the built environment. There are no offsite project components; the entire P3 project would be confined to a portion of the existing Mandalay Generating Station (MGS).

No significant cultural resources were identified within either the archaeological or historic architectural PAA defined for the P3 Project.

The natural and cultural setting sections below are a summary of the more detailed information in the technical reports prepared for this application, and provided as Appendices E-1 and E-2 (AECOM, 2015a; 2015b).

4.3.1.1 Natural Environment

The P3 site is in the Ventura Basin, on the westernmost edge of the Oxnard Plain immediately adjacent to the Pacific Ocean. The vicinity immediately surrounding P3 is characterized by a mix of agricultural, residential, and industrial development. The climate is mild, with warm summers and cool winters. Rainfall is moderate, and concentrated in the winter months, although summer showers do occur when onshore air circulation patterns become established. Native vegetation in the vicinity was likely comprised of the Coastal sage scrub that was once common in coastal Ventura County. Coastal sage scrub is characterized by a suite of low, aromatic, drought-tolerant shrubs and sub-shrub species. A detailed description of the natural environment in which the project is located can be found in Section 4.2, Biological Resources; and Section 4.15, Water Resources.

4.3.1.2 Prehistoric Background

Numerous chronological sequences have been devised 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 periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric (also referred to as Horizons I – IV, respectively). 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 that have been obtained over the last three decades from sites in the region.

Several revisions have been made to Wallace's (1955) synthesis, with perhaps Warren's (1968) being the most widely used. Building upon Wallace, Warren (1968) proposed a series of six prehistoric traditions. Three of these, the San Dieguito, the Encinitas, and the Campbell traditions, correlate with Wallace's Horizons I, II, and III. The Chumash, Takic (formerly "Shoshonean"), and Yuman traditions are represented by Wallace's Horizon IV. 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), and is supplemented by more recent work conducted in the region.

4.3.1.2.1 Horizon I: Early Man – San Dieguito Tradition (ca. 10,000–6,000 B.C.)

When Horizon I (Early Man) was defined by Wallace (1955), there was little archaeological evidence to suggest that human populations inhabited the southern California coast prior to 6000 B.C. Subsequent to Wallace's work, however, archaeological investigations in the region identified a number of sites dating back to 6000 B.C. (and earlier) on both on the mainland coast and the Channel Islands. Closest to the

Ventura County coast, two sites on the Channel Islands have produced fairly reliable early-Holocene dates. Materials recovered from the Arlington Springs site on Santa Rosa Island date to approximately 13,000 years ago; while on San Miguel Island at Daisy Cave, dates as far back as about 10,000 years ago have been obtained.

Data from Horizon I sites suggest that the indigenous economy was focused on a diverse mixture of hunting and gathering, with the emphasis on aquatic resources in the coastal areas. Subsistence patterns shifted around 6000 B.C., coincident with the onset of the Altithermal, the approximately 3,000-year-long warm and dry period that resulted in a drastic alteration of environmental conditions. After 6000 B.C., the indigenous economy placed a greater emphasis on the procurement of plant foods, supplemented by the take of smaller animals.

4.3.1.2.2 Horizon II: Millingstone Period – Encinitas Tradition (6000–3000 B.C.)

As evident in the naming of the period, the Millingstone (Horizon II) is characterized by an archaeological assemblage dominated by Millingstones (metates) and handstones (manos) accompanied by large and fairly crudely fashioned core/cobble choppers and scrapers. The preponderance of ground-stone tools in these assemblages suggests that hard seed processing became a major subsistence practice during this period. Overall, the economy was based on plant collecting, but was supplemented by fishing and hunting. The reliance on this seed-focused subsistence strategy and affiliated tools is further supported by the relative scarcity of faunal remains in Millingstone Period deposits, and for the fact that projectile points and other hunting-type tools tend to be absent from Millingstone Period assemblages. Initially, in the near-shore and coastal locations, there also appears to have been infrequent exploitation of marine and estuarine resources. It is further suggested that these assemblages reflect a mixed food procurement strategy that was developing as these groups became better adapted to the coastal environment in which they lived (Wallace, 1955; Warren, 1968).

In the Santa Barbara Channel region, Millingstone sites tend to be on elevated terraces and knolls, typically set back from the current coastline. The larger sites exhibiting well-developed shell midden deposit have features interpreted as subterranean house pits, and cemeteries. The majority of these sites likely reflect intermittent use over many years of local cultural habitation and resource exploitation.

4.3.1.2.3 Horizon III: Intermediate – Campbell Tradition (3000 B.C.–A.D. 500)

About 5,000 years ago, the economic adaptations of the Millingstone Period began to shift away from its reliance on certain vegetal resources (e.g., hard seeds) and transition more towards the procurement of animals as a source of food. This observed shift in food procurement strategies, as evidenced in an increase in the recovery of fish, terrestrial mammal and marine mammal remains from archaeological deposits dating to this period, is characteristic of Wallace's (1955) Intermediate Horizon and Warren's (1968) Campbell Tradition. A diversified flaked-stone tool assemblage comprised of large side-notched, stemmed, and lanceolate projectile points; larger blades; a variety of flake scrapers, and drill-like implements is further evidence of the increased consumption of animal protein by the indigenous population.

A general broadening of the plant resources being procured is also hypothesized. In the Santa Barbara Channel region, mortars and pestles replace the millingstone/handstone that was so predominant in Millingstone Period assemblages. It is hypothesized that this could reflect the greater consumption of acorns by the indigenous population. It has been further suggested that mortars and pestles may have been used initially to process roots, but were ultimately adapted to acorn processing. In addition to the more common bowl mortar, hopper mortars, as well as other stone bowls including steatite vessels, appear in the artifact assemblage at this time, generally were interpreted as further evidence of the increasing diversification of subsistence resources in the indigenous economy. A seasonal round settlement pattern during this period is still hypothesized; however, permanently occupied settlements,

particularly in resource-rich coastal areas, appear to characterize the settlement pattern by the end of the period.

4.3.1.2.4 Horizon IV: Late Prehistoric (ca. A.D. 500–Historic Contact)

Wallace's (1955) Late Prehistoric Horizon begins circa A.D. 500 and is marked by a seemingly abrupt change in material culture, burial practices, and subsistence focus. It is at this time that the bow and arrow are introduced. The end of the Period is coincident with the end of the 18th Century, when the Spanish annexation and colonization of Alta California, as manifested in the religious military mission system, took full effect on the indigenous populations.

In Warren's (1968) chronologic scheme, the period between A.D. 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura counties; the Takic or Numic Tradition in the Los Angeles and Orange counties region; and the Yuman Tradition in the San Diego region. Some of the shift is attributed to an influx of peoples from the inland desert regions onto the coast of Southern California; however, in the Santa Barbara Channel region, Warren (1968) hypothesizes that this culture likely began developing on the coast during the Intermediate, and more assuredly from the Campbell Tradition.

In the Santa Barbara Channel region during the Late Prehistoric, the archaeological assemblages contain a wealth of ornamental, ceremonial, and artistic items that have come to characterize the Chumash Tradition (Warren, 1968). Marine shell and stone beads, pendants, and other ornaments are abundant; and bowls, pestles, pipes, and stone tubes inlaid with shell beads, often engraved, are found. Marine shell is also used in the manufacture of more utilitarian items, including *Haliotis* bowls/dishes and fishhooks. Flaked-stone artifacts include both large and small projectile points; and drills, associated with the burgeoning practice of manufacturing marine shell beads and ornaments, are also abundant. The ground-stone artifact assemblage continues to include mortars and pestles, as well as items such as bowls, pipes, and ornaments manufactured from locally sourced steatite. It is hypothesized that this increase in the diversity and complexity of artifacts in the archaeological assemblages reflects the further broadening of the resource base, including increased reliance on plant food resources and an increase in the hunting of both terrestrial and marine mammals.

4.3.1.3 Ethnographic Background

The P3 PAA is in the historic territory of the Native American group referred to today as the Chumash. The name Chumash is derived from *Mi'chumash*, a name originally used by some mainland groups to identify the inhabitants of the offshore Channel Islands.

Europeans first encountered the Chumash in 1542, when Cabrillo landed on the shores of what is now Ventura. At the time of initial contact, the Chumash ranged from San Luis Obispo to Malibu Canyon along the coast; inland as far as the southwestern margin of the southern San Joaquin Valley; and out to the four northern Channel Islands. The Chumash are further sub-divided into factions based on six distinct dialects: Barbareño, Ventureño, Purisimeño, Ynezeño, Obispeño, and Island. The P3 site falls within the lands associated with the Ventureño Chumash, the name deriving from Mission San Buenaventura, which was founded in the area in 1782.

The Chumash were very advanced in their culture, social organization, religious beliefs, and art and material object production. Class differentiation, inherited chieftainship and inter-village alliances were all components of Chumash society. The development of a highly effective maritime subsistence pattern, comprised of exploitation of fish, shellfish, sea mammals, and waterfowl, enabled Chumash villages of nearly 1,000 individuals to cluster in areas along the coast.

At the time of European contact (1542), large Chumash villages typically contained sweathouses, storehouses, numerous homes, ceremonial areas, and extensive middens of residential debris. Villages were located near important resources in coastal, estuarine, and riparian habitats. Cemeteries typically were near the villages; elaborate burial practices included the interment of grave goods such as beads, quartz crystals, red and yellow pigments, delicate soapstone bowls, sandstone mortars, and carved charmstones.

4.3.1.4 Historic Background

The following section provides background on the historic setting of the project vicinity. In terms of historic-period resources, regional history begins with Spanish explorations beginning in 1542. These explorations resulted in the establishment of Spanish mission and land-granted properties throughout the region. In the late 1800s, the Spanish land grants were parceled out to Ranchos for agriculture and cattle. A combination of railroads, oil, and natural agricultural soils (ideal for sugar beets) attracted more settlers, and the City of Oxnard was established as a planned community around the Oxnard brothers' American Sugar Beet Company factory. The City of Oxnard was further developed after the population boom following World War II (WW II) and the establishment of local military installations, including Naval Base Ventura County, Naval Air Station Point Mugu, and Oxnard Air Force Base, and sustained by the Southern California power boom during the mid- to late-twentieth century.

4.3.1.4.1 Spanish-Mexican Period

Juan Rodríguez Cabrillo sailed north from Mexico along the California coast in 1542. Accounts of the voyage state the expedition sailed past Wene'mu or Quelqueme (Hueneme), and anchored near the large village at Muwu (Point Mugu). A second Spanish expedition, led by Sebastian Vizcaíno, explored the Oxnard area in 1602.

By the 1760s, the Spanish government established a series of presidios (military garrisons), towns, and missions throughout California to counter English and Russian encroachment. An expedition left the colony at San Diego in the summer of 1769 under the command of Gaspar de Portola, the governor of Baja California. The objective was to locate an overland route to Monterey Bay and identify prospective presidio locations along the route. Portola's expedition passed through the Oxnard area on its return to San Diego.

Following Portola's expedition, Spanish visits and activity increased. An expedition led by Juan Bautista de Anza passed through the Oxnard area in spring of 1776. Father Junipero Serra founded Mission San Buenaventura in Ventura in 1782. The mission was constructed a few hundred yards north of the Chumash village of *Shisholop,* near the Pacific Ocean and east of the entrance of the Ventura River. The Spanish taught the Chumash the trades that enabled them to build and maintain the mission establishment. By the early 1800s, the majority of the Chumash were incorporated into the Spanish mission system, except for a small number who migrated to the interior or escaped the mission system. The Chumash eventually constructed a 7-mile-long aqueduct between 1805 and 1815 to provide the mission with water. The mission's self-sustaining and income-producing activities included small-scale agriculture and raising cattle and sheep.

Spanish rule in Alta California came to an end in 1821 with Mexican Independence. The missions were secularized in 1832, and the Mexican government of Alta California began granting large pieces of land to Mexican citizens. During Mexican rule, missions declined in influence, and large cattle ranches, called Ranchos, came into dominance in the County of Ventura. By 1846, the County of Ventura was divided into 19 Ranchos, seven of which were on the Oxnard Plain and the Santa Clara Valley. These Ranchos included Rancho Santa Paula y Saticoy, Rancho Santa Clara del Norte, Rancho El Rio de Santa Clara o La Colonia, Rancho Calleguas, Rancho Guadalasca, Rancho Las Posas, and Rancho San Francisco

(Camulos). The P3 site falls within the lands of the Rancho El Rio de Santa Clara o La Colonia (Rancho Rio de Santa Clara).

The 44,833-acre Rancho Rio de Santa Clara encompassed much of the Oxnard Plain, reaching to the Pacific Ocean on the west; bordered by Ranchos San Miguel and Santa Clara del Norte to the north; and Rancho Guadalasca to the east. Governor Alvarado awarded the land in 1837 to eight Mexican soldiers from the Santa Barbara Company: Valentin Cota, Vicente Pico, Rafael Valdez, Jose Maria Valenzuela, Salvador Valenzuela, Vicente Feliz, Leandro Gonzales, and Rafael Gonzales. Although some of the soldiers grazed cattle on the Rancho, it is believed that Rafael Gonzales was the only individual to reside on the property. His adobe home was between present-day Gonzales Road and the Santa Clara River, approximately 2 miles northeast of the project site.

4.3.1.4.2 American Period

The United States (U.S.)-Mexican war began in 1846 and ended in 1848, following the formulization of the Treaty of Guadalupe Hidalgo. Under the terms of the treaty, Mexico ceded what are now the states of California, Nevada, Utah, New Mexico, Arizona, and parts of Wyoming and Colorado. A provision of the Treaty of Guadalupe Hidalgo was the protection of property and civil rights of Mexican nationals living within the new boundaries of the United States.

The discovery of gold in northern California the same year, 1848, attracted greater numbers to California from all over the world. California's population grew so rapidly that just 2 years after the U.S. had acquired the land from Mexico, it became a state. The Homestead Act of 1862 brought additional settlers to California—and the County of Ventura—in search of farmland. During this period, the vast Ranchos, including the Rancho Rio de Santa Clara, were subdivided into parcels manageable as family farms, leading to the widespread settlement of the Oxnard Plain by European-Americans. During this period, the cattle herds that had characterized the landscape during the Rancho era were decimated by drought, and new crops were introduced that proved productive in the area soils. Although irrigation for crops was still not widespread, it was actively pursued. The first small communities began to appear on the Oxnard Plain, but it lacked a single dominant population center, and transportation remained a significant challenge for settlers.

The City of Oxnard was named in 1898 after the Oxnard brothers, who were early settlers and led the region's sugar beet industry. That year, the Colonia Improvement Company was formed to lay out the town site. The town was laid out on the grid system, with a central square. Houses, churches, and schools were soon built, although some buildings were also moved in from Hueneme and Saticoy to accommodate the town's rapid growth. The new City of Oxnard drew people from nearby communities such as Hueneme and New Jerusalem.

By the time the City of Oxnard incorporated in 1903, the subdivided lands of the former Rancho Rio de Santa Clara were widely settled. Local leader, J.R. Gabbert, reported in 1912 that the City of Oxnard's freight business was larger than all the other cities between San Luis Obispo and Los Angeles combined.

During World War II, the City of Oxnard experienced its greatest growth, with the population more than doubling from 8,519 in 1940 to 21,567 in 1950. Oxnard became the largest city in Ventura County in 1950, and remains so to the present day. Aerial photography shows that although the eastern Oxnard Plain has remained largely agricultural from the mid-twentieth century to the present, pockets of development have occurred; transforming the community's rural past to a more suburban setting.

4.3.1.5 Site-Specific Background

MGS, including the P3 site, is situated on lands once part of the 5,000-acre Patterson Ranch. The ranch belonged to J.D. Patterson, who was one of the area's largest landowners in the later decades of the

nineteenth century. Owing to marshy land that offered less-than-ideal growing conditions, Patterson raised horses on his ranch instead, including 500 (mostly) French draft horses. With the draining of the marshes, however, agriculture, primarily the growing of sugar beets, expanded onto the formerly marshy lands including the Patterson Ranch.

Although part of an active ranch, historic topographic maps and aerial photographs (EDR, 2015) indicate the project area was entirely void of development well into the decades following World War II. An aerial of the project site from 1947 (Figure 4.3-3) clearly shows the project site was comprised of sand dunes exhibiting low, scrubby vegetation. An aerial photograph from 1959 (Figure 4.3-4) depicts the completed MGS facility. The MGS was constructed by Bechtel Corporation from 1956 through 1959 as part of Southern California Edison's (SCE) 10-year work program to double its power output to keep up with the growing power needs of the rapidly expanding community.

Construction documents, including the original topographic survey completed in advance of MGS construction, reveal that the dunes in the vicinity of the current P3 site reached elevations of over 20 feet above mean lower low water (MLLW) (Figure 4.3-5). Currently, the location for the proposed P3 gas turbine exhibits elevations of between 13.6 and 15 feet (North American Vertical Datum of 1988 [NAVD88]), indicating cuts of up to several feet in depth (MLLW = NAVD88 ± 0.155 feet) occurred in the P3 area during the period of original plant construction (ca. 1956-1959).

4.3.1.6 Resources Inventory

4.3.1.6.1 Records Search and Archival Research

At the request of AECOM, a California Historical Resources Information System (CHRIS) records search was conducted by the staff of the SCCIC on January 5, 2015 (Records Search #14648). The purpose of the records search was to identify all previously conducted cultural resource surveys and studies, as well as all previously recorded cultural resources in the PAA, as defined for both archaeological and historic architectural resources, as well as within the CEC-mandated 1-mile search radius (CEC, 2008:398). The results of the records search are provided in Appendix E-3.

The records search included ethnographic and historic literature and maps; federal, state, and local inventories of historic properties; archaeological base maps and site records; and survey reports on file at the SCCIC. The records search and subsequent archival research also included a review of information available at and/or with:

- California Points of Historical Interest;
- California Historical Landmarks;
- California Office of Historic Preservation (OHP) Directory of Historic Properties — Records entered into the OHP computer file of historic resources, received quarterly;
- California OHP Archaeological Determinations of Eligibility — Records entered into the OHP computer file, received quarterly;
- California State Library;
- California Historical Society;
- California Register of Historical Resources (CRHR);
- CEC/Seabee Historical Foundation;
- City of Oxnard Planning Division;
- City of Oxnard Building and Engineering Services;
- County of Ventura Building and Safety Department;
- County of Ventura Assessor's Office;
- Department of the Navy, Naval Base Ventura County;
- Five Views: An Ethnic Sites Survey for California (1988);

- Heritage Square Oxnard;
- Historical Society of Southern California;
- Huntington Library, SCE Records;
- Museum of Heritage Foundation;
- National Register of Historic Places (NRHP);
- Oxnard Historic District;
- Oxnard College Learning Library Resource Center;
- Port Hueneme Historical Society Museum;
- Port Hueneme and the Friends of the Bard Mansion;
- SCE Archives; and
- Ventura County Library.

Additional site-specific primary and secondary research was conducted at numerous online resources (e.g., Calisphere – A World of Digital Resources, California Historic Topographic Map Collection, Digital State Archives, and Online Archive of California). The Digital Sanborn Maps 1867-1970 were consulted, but the project site was not visible on the Oxnard maps (LAPL, 2015). In addition, supplemental research was conducted in person with local agencies and groups, including the California State University Channel Islands, John Spoor Broome Library, Museum of Ventura County Research Library, Oxnard Historic Farm Park Museum, Oxnard Public Library Local History Collection, City of Oxnard Planning Division, City of Oxnard Building and Engineering Services, County of Ventura Building and Safety Department, County of Ventura Assessor's Office, and Port Hueneme Historical Society Museum. In addition, a review of historic maps and aerial photographs was conducted (Tables 4.3-1 and 4.3-2).

The records search revealed that there are no previously identified cultural resources in the P3 site, or in the larger MGS property. The records search further revealed a total of 20 previously conducted cultural resources investigations and five previously identified cultural resources in the CEC-mandated 1-mile radius records search area (Tables 4.3-3 and 4.3-4). Of the 20 previously conducted cultural resources investigations, all included an archaeological component, and seven specifically discussed historic architectural resources. Portions of the archaeological and historic architectural PAAs, and the entire project site, have been previously subject to cultural resources investigations. In addition to site forms obtained from the SCCIC, maps depicting the location of previous surveys, and previously identified resources based on these record search results, are provided in Appendix E-3. Below are separate discussions of how the records search results relate to the PAAs defined for both archaeological and historic architectural resources.

Previously Conducted Cultural Resources Investigations within the Archaeological PAA

As detailed in Table 4.3-3, four of the 20 previously conducted investigations in the larger records search area covered a portion of the current archaeological PAA; they are discussed further below. As a result of these four investigations, the entire archaeological PAA, as defined for the P3 project, has been previously subjected to cultural resources investigation, including archival research, Native American coordination, and pedestrian survey. It should be noted, as plotted by the SCCIC, VN-002978 encompasses the entire archaeological PAA. Further review of the survey report, however, reveals that the project's Area of Potential Effects is, in fact, over 2 miles to the east. Therefore, VN-002978 is not included in the following discussion of previously conducted cultural resources studies that include a portion of the archaeological PAA.

VN-000236

Stephen Horne prepared *Onshore Cultural Resources Assessment Union Oil Company Platform Gina and Platform Gilda Project Federal Leases OCS P-0202 and P-0216 Offshore California* in 1980. This study

addressed an area that included approximately 90 percent of the current archaeological PAA. Horne's effort included background research, pedestrian survey, subsurface survey consisting of shovel tests, and ethnographic studies. No cultural resources were identified in or adjacent to the archaeological PAA as a result of this study.

VN-000398

Robert J. Wlodarski prepared *Archaeological Monitoring Report for the Proposed Location of an 8 Montalvo Pipeline, Along Harbor Boulevard, Ventura County, California*, in 1981. As plotted by the SCCIC, this linear study intersects the easternmost portion of the current archaeological PAA. Wlodarski's archaeological monitoring of the new pipeline did not identify the presence of cultural resources in or adjacent to the archaeological PAA. In addition, Wlodarski notes the extensive level of subsurface disturbance throughout the entirety of his project's study area.

VN-00621

Robert Lopez prepared *An Archaeological Reconnaissance of Portions of the Area Proposed for Mandalay State Beach Regional Recreation Park, Oxnard, Ventura County, California*. This study included archival research and an intensive pedestrian survey of a 90-acre project area, a portion of which covers approximately 20 percent of the current archaeological PAA. Although Lopez identified stands of Juncus textilis and Juncus acutus in his project area, which were used by Native Americans to make various types of baskets, he did not consider their presence alone to represent a cultural resource. No archaeological resources were identified in or adjacent to the current archaeological PAA as a result of Lopez's efforts.

VN-001509/1733

As plotted by the SCCIC, Bradley L. Strum's 1985 report *Ventura Marina Dredging Project* addressed approximately 50 percent of the archaeological PAA. Strum's effort included background research and pedestrian survey of the project area. Although Strum mentioned his project area's proximity to a previously documented ethnographic site (CA-KER-1234), no cultural resources were identified in or adjacent to the P3 PAA during his efforts. Further review of the records search results revealed that studies VN-001509 and VN-1733 are the same report. It is unclear why two separate numbers were designated by the SCCIC (Table 3). Copies of each are provided in Appendix E-3.

Previously Identified Archaeological Resources in the PAA

There are no previously identified archaeological resources in the archaeological PAA as defined for P3.

Previously Identified Archaeological Resources in the Record Search Area

The records search revealed that three previously identified archaeological resources are in the records-search radius as mandated by the CEC (Table 4.3-4). None of these archaeological sites, however, are either in or immediately adjacent (less than 200 feet) to the archaeological PAA as defined for P3.

CA-VEN-667

Stephen Horne and Steven Craig originally documented CA-VEN-667 in 1979, and noted the presence of lenses of midden and shell eroding from a stabilized sand dune. David S. Whitley updated the existing site forms in 1997, and again noted shell lenses eroding from a sand dune. No prehistoric artifacts were identified by either effort. Both Horne and Craig's original recordation and Whitley's subsequent update noted extensive disturbance as a result of oil-field–related activities in and near the site. Although human remains were not observed by Horne and Craig, an "unconfirmed report" of burial, which was exhumed

200 yards north of West Fifth Avenue, was noted in the site form. As recorded, CA-VEN-667 is situated approximately 1,300 feet from the archaeological PAA.

CA-VEN-1234

Stephen Horne and Steven Craig's 1979 archaeological site form for CA-VEN-1234 described the resource as a purported modern ethnographic plant-collecting area. Specifically, they noted that according to Ms. Jessie Roybal of the Candaleria Native American Council, the area was used in modern times to collect *Juncus* spp., a plant commonly used by the Chumash to make baskets. The site form also noted, however, that further ethnographic study by Dames & Moore ethnologist, Ray Scupin, revealed that local Chumash descendants denied this area was used for plant collection, and that areas near Point Mugu were preferred. The alleged gathering area is approximately 850 feet south of the archaeological PAA.

CA-VEN-1807/H

Sarah Williams recorded CA-VEN-1807/H in 2010, and noted the presence of a light scatter of prehistoric material comprised of two pieces of flaked stone, one fragment of earthenware pottery, and one fragment of groundstone. Williams also noted the presence of two fragments from a mid-twentieth –century aqua-colored glass insulator. This site is situated in a moderately disturbed context across Harbor Boulevard, adjacent to an SCE transmission tower and approximately 430 feet east of the archaeological PAA.

Previously Conducted Cultural Resources Investigations within the Historic Architectural PAA

As detailed in Table 4.3-3, seven of the 20 previously conducted investigations in the larger records search area included discussions of historic architectural resources. The synthesis below focuses on those previously conducted cultural resources investigations identified in the records search that contain historic architecture surveys and/or findings. It should be noted that VN-00236 and VN-1509/VN-001733 are also included in the previous section discussing archaeological investigations and resources, because these two studies contained efforts addressing both archaeological and historic architectural resources.

Lastly, as noted above and as depicted on the records search maps provided by the SCCIC, VN-002978 encompasses the entire historic architectural PAA defined for P3. Further review of the survey report, however, reveals that the project's Area of Potential Effects and corresponding survey area are, in fact, approximately 2 miles to the east of the historic architectural PAA. Because none of the historic architectural inventory efforts completed for VN-002978 included areas in the historic architectural PAA, this report is not discussed below.

VN-00236

VN-00236, prepared by cultural resources consultant Stephen Horne, documents a cultural resources survey conducted for the onshore portion of the Union Oil Company Platform Gina and Platform Gilda Project in 1980. Horne identified five landmark sites of local historic importance. These local historic landmarks consisted of the Naumann Giant Gum Tree and Eucalyptus Grove (Ventura County Landmark No. 15), Japanese Cemetery (Ventura County Landmark No. 18), Bard Memorial (Ventura County Landmark No. 20), Hueneme Slough Site (Ventura County Landmark No. 37), and Ventura Road Eucalyptus Grove. None of these historic architectural resources are in the current PAA as defined for historic architectural resources.

VN-01475

VN-01475 was completed as part of a cultural resources survey of McGrath State Beach by Philip Hines in 1986. Investigators surveyed a parcel south of the existing state beach campground. The remains of an oil test shaft (Mobil Oil Corp., McGrath No. 1) were recorded. The oil shaft was drilled as part of the West Montalvo Oil and Gas Field, and was composed of a square concrete slab that measured approximately 20 feet per side. Information on the well can be found in file API No. 111-00746, California Department of Conservation, Division of Oil and Gas, Ojai, California. The oil shaft was not formally evaluated for eligibility to a registry, and is not in the historic architectural PAA.

VN-01509/VN-01733

VN-01509/VN-01733 was prepared by Bradley Sturn as a memorandum for record concerning the Ventura Marina Dredging Project in 1985. On July 18, 1985, Bradley Sturn completed a pedestrian survey of the breakwater, the proposed dredging pipeline route, and disposal site. An enigmatic pier foundation was observed, and Sturn suggested that this foundation may have been a base for a super structure such as an oil derrick, but provided no evidence to support this hypothesis.

VN-02474

VN-02474 was prepared in compliance with Section 106 of the National Historic Preservation Act as part of an undertaking under the review of the Federal Communication Commission. The project focused on an existing transmission tower adjacent to Harbor Boulevard, north of Fifth Street. This report was authored by Sean Thai of EarthTouch Inc. in 2005. The report lists "no historic properties affected" as the outcome of the collocation of a cellular telephone antennae on an existing 125-foot steel lattice transmission tower. Although the transmission tower was not recorded as part of this investigation; as discussed below, it was recorded during a subsequent investigation (VN-02901).

VN-02901

VN-02901 was completed as part of a historic architecture assessment for a cellular tower site, known as Clearwire candidate CA-VTA0119A, by Wayne Bonner, Sarah Williams, and Kathleen Crawford of Michael Brandman Associates in 2010. The survey determined that the transmission tower (P-56-153002), at 400 N. Harbor Boulevard, is not in a cohesive neighborhood and is not otherwise associated with any important historical or cultural events or individuals; therefore, it was recommended as not eligible for listing to a registry. This resource is in the historic architectural PAA.

Previously Identified Historic Architectural Resources in the PAA

The records search revealed that one historic architectural resource, P-56-153002, has been previously identified in the historic architectural PAA.

P-56-153002

P-56-153002 is 0.1 mile east of the project site but within the Historic Architectural PAA defined for the project, and was recorded in 2010 by K.A. Crawford of Michael Brandman Associates. Historically known as SCE Mandalay-Santa Clara 1 and 2 Transmission Tower, P-56-153002, consists of a steel lattice tower located in the larger parcel boundaries of an SCE-owned substation (approximately 150 feet past the fence-line of the substation). The tower, built in 1958, stands 150 feet tall, and is at the northwestern corner of the larger substation parcel in an area that is primarily undeveloped land. The area is mainly used for industrial power sources, and is primarily sand dune in composition. The tower appears to be in good condition, and no major alterations were noted. The resource was assigned Status Code 6Y, which means determined ineligible for listing in the NRHP through a consensus determination

of a federal agency and the State Historic Preservation Officer (SHPO). The resource was not evaluated for CRHR eligibility or local City of Oxnard register eligibility.

Previously Identified Historic Architectural Resources in the Records Search Area

The records search revealed that one historic architectural resource, P-56-152738, has been previously identified in the records search area, but is outside of the PAA as defined for historic architectural resources.

P-56-152738

P-56-152738 is a private residence thought to have been constructed by Dominick McGrath shortly after his arrival in Ventura County in the 1870s. The two-story structure is built on a rectangular floor plan with wide clapboard siding. The terminated pavilion roof uses asphalt shingles. An enclosed porch, possibly a later addition, runs along the façade. A garage and numerous small buildings for livestock and poultry are to the rear of the house. The house was recorded as being in poor condition, although structurally sound. The recordation of the residence does not include a formal evaluation of the property for inclusion to either the National or California registries of historic properties. Although within the records search radius, this resource is located over 0.5 mile away from the historic architectural PAA.

4.3.1.6.2 Native American Consultation

In addition to the records search request with the SCCIC, a letter was sent, via facsimile, to the NAHC on January 15, 2015, requesting a search of the Sacred Lands File and any information the NAHC may have regarding cultural resources in or near the PAA. A response received from the NAHC on January 23, 2015, indicated that there were no records in the Sacred Lands File regarding cultural resources in the vicinity of the project site. However, the NAHC provided a list of individual Native Americans in the area who may have additional information. Letters to the 19 individuals listed were sent on January 29, 2015; and follow-ups were made by email or telephone on February 25, 2015 (Table 4.3-5).

To date, AECOM has received three responses:

- Patrick Tumamait, Chumash, contacted AECOM via telephone on February 2, 2015. Mr. Tumamait indicated to AECOM that there are several sites in the area, but that he had "no concerns in the direct vicinity" of P3.

- Fred Romero, Chumash, Santa Ynez Band of Mission Indians, left a message via telephone with AECOM on February 4, 2015. AECOM returned the call to Mr. Romero the following day (February 5, 2015). Mr. Romero stated that the Santa Ynez Band of Mission Indians had no comment on the project area; however, he wanted to confirm that AECOM had contacted other tribes in the vicinity, and that he would defer to them.

- Richard Angulo, Chumash, left a message via telephone with AECOM on February 4, 2015. AECOM returned the call to Mr. Romero the following day (February 5, 2015). Mr. Angulo informed AECOM that the project area is "very sensitive" and that a burial ground had been discovered and destroyed to the south of the project area. He then stated that he wanted it on the record that "if monitoring is to occur, he recommends that Patrick Tumamait be the monitor." He went on to say that "if Patrick does the monitoring, he has nothing to worry about."

Any future responses received after the date of this Application for Certification (AFC) will be directly forwarded to the CEC. Copies of the NAHC request letter, NAHC response letter, and individual contact letters, are appended to the Archaeological Technical Report, which is a confidential appendix to this report (Appendix E-1).

4.3.1.6.3 Archaeological Field Reconnaissance

On January 12, 2015, AECOM Senior Project Archaeologist Mark Hale, and AECOM Staff Archaeologist Leroy Laurie conducted an intensive pedestrian archaeological survey of the PAA, as defined for archaeological resources for the project. The survey area included all areas of proposed disturbance and a 200-foot buffer around the project site and proposed staging areas. The archaeological PAA was visually inspected using block survey, which was completed by walking an alternating series of parallel transects spaced approximately 10 to 15 meters (approximately 45 to 55 feet) apart. The archaeological investigation for the project was carried out under the guidance and supervision of AECOM Senior Archaeologist Ben Elliott, M.A, who meets the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (NPS, 1983).

Mr. Hale and Mr. Laurie visually inspected the archaeological PAA for the presence of archaeological materials; including, but not limited to, prehistoric and historic habitation debris, prehistoric features, and historic structural remains. Surface visibility was generally excellent (over 90 percent visible) in the primary project locations, including the Gas Turbine Erection Area/Material Storage and Laydown in the northern lobe of the PAA, as well as the Overflow Material Storage and Laydown Area in the southern lobe of the PAA. Surface visibility was poor along the route of the proposed waterline, because it bisects an area of the MGS that is nearly completely covered by asphalt. The CEC-required 200-foot buffers areas, which also comprise the PAA as defined for archaeological resources, offered both excellent and poor surface visibility. Figure 4.3-6 depicts the differing surface visibility across the PAA.

In areas where vegetation obscured the ground surface in undeveloped areas, 20-centimeter by 20-centimeter patches (e.g., boot scrapes) were used at regular 20-meter intervals to clear vegetation and increase ground visibility.

No archaeological resources were identified in the PAA as defined for archaeological resources for the project during the course of the current investigation. Throughout the location where the proposed gas turbine would be constructed (the northern lobe of the current PAA as depicted in Figure 4.3-1), concentrations of marine shell occur. These concentrations, some quite dense, often occur with fragments of torn black textiles.

Questioning of plant staff supplemented by additional archival research revealed that the area now designated for construction of the gas turbine was previously used for the processing and stockpiling of sediments dredged from the Edison Canal (referred to in dredging plan by Eagle North America in 2003 as the Manalay [sic] Intake Canal). The process involved pumping dredge sediments via a pipe directly into a field of "Geotubes" (industry name for high-strength, permeable geotextile bags designed to hold sediments). Prior to the placement and subsequent filling of the Geotubes, the area was graded, the excavation then lined with synthetic fabric, and a containment ditch was excavated around the perimeter of the stockpile area. Once the dredged material was sufficiently processed (i.e., dewatered), the Geotubes were cut open and the dewatered sediments removed from the field by means of excavators and front-end loaders, placing the dredge material into dump trucks for off-site disposal. An aerial photograph from 2005 (Figure 4.3-7) clearly shows the area of the MGS parcel where the gas turbine would be constructed covered in these Geotubes.

From the visual inspection of the parcel, it is quite evident that a significant amount of the dredged material remains on site. Although the deposit of marine shell somewhat resembles a prehistoric deposit, all of the shell looks relatively fresh (i.e., modern); there is no charcoal or other evidence of fire and/or burning; there is no lithic material (flaked, ground, or fire-affected); and there are sections of the black textile intermixed with the shell deposit. All evidence indicates that the shell deposit observed in the PAA is the result of these dredging efforts. It is unknown what the exact depth of the dredged material is across the P3 site; however, in some locations it appears at least 1 foot in depth.

Similar, though less dense and wide spread, shell debris was also observed near the Edison Canal. This material also appears to be the result of dredging, perhaps associated with the large project outlined above; or during small, more localized dredging events in the channel.

4.3.1.6.4 Historic Architecture Field Reconnaissance

On January 12, 2015, and between February 11, 2015 and February 12, 2015, AECOM Senior Architectural Historian Jeremy Hollins, M.A., Architectural Historian Sarah Champion, M.A., and Historic Archaeologist Lauren Bridges, M.A., RPA, conducted a historic architectural survey of the PAA for historic architectural resources as defined for P3. All work was conducted under the guidance and direction of Mr. Hollins, who qualified under the *Secretary of Interior's Professional Qualification Standards* (36 Code of Federal Regulations Part 61) in the disciplines of Architectural History and History.

During the field efforts, the investigators used Department of Parks and Recreation (DPR) 523 series forms to record built environment features in the PAA as defined for historic architectural resources. Recorded features were also photographed and mapped at this time. The DPR forms are attached to the historic architectural technical report, which is appended to the AFC (Appendix E-2). Based on the results of the background investigation and the field survey, AECOM conducted research at the facilities and sources identified earlier in this section.

AECOM used the research data collected to prepare a historic context to address the property types and pertinent themes of development in the study area. The historic themes are discussed in Section 3 of the appended technical report (AECOM, 2015b; Appendix E-2). AECOM evaluated the resources in the historic architectural PAA in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code (PRC), and also under NRHP and CRHR criteria, on the DPR 523 forms included in Appendix E-2. Each evaluated property is described below and shown on Figure 4.3-8.

Edison Canal

The Edison Canal is an approximate 4.5-mile–long, open, earthen and concrete-lined water-conveyance channel constructed by SCE as a source of cooling water for the MGS power plant (Ventura County Star-Free Press, 1957a-c, 1958a-d, and 1959a-d). Construction of the canal began in 1957, when a 100-ton dredger known as the "Explorer" started clearing the area. The canal was completed and operational in 1959, providing a supply of seawater for the cooling needs of the MGS, which had recently been brought on line.

The northern portion of the Edison Canal, which is in the PAA, terminates at a culvert west of the MGS. The canal was constructed with earthen banks in a deep, trapezoidal shape, and features no control or erosion structures in the PAA. In several locations, there are recently constructed pedestrian and vehicle crossings and bridges (such as along Harbor Boulevard). The property is in a rural setting surrounded mostly by industrial uses, including oil- and gas-processing facilities, power-generation facilities, agricultural fields, and open space.

The portion of the Edison Canal under review in the PAA is approximately 0.5 mile long and approximately 140 feet wide. Although the portion of the canal in the PAA is part of a larger linear resource, only the 0.5-mile-long portion of canal in the PAA was recorded and evaluated as part of this assessment, to determine if it would be considered a contributor to larger significant linear resources, or individually significant. The portions outside of the PAA were not recorded, because the potential effects to the resource as a whole would be negligible.

Mandalay Generating Station

MGS is the NRG California South LP-owned power-generating facility currently comprised of three power-generating units, supported by tanks, a maintenance building, an administration building, and other ancillary features originally constructed by SCE between 1956 and 1959. The generating station is bordered to the west by the Pacific Ocean; to the south by the McGrath Peaker Plant and undeveloped land; to the north by undeveloped land, primarily sandy dune in composition; and to the east by the SCE Substation and the SCE Switchyard (both described below).

The majority of the buildings and structures associated with power generation are arranged along the western portion of the property; and the administrative and maintenance buildings are placed on the eastern portion of the parcel. The buildings and structures do not appear to be arranged in a visual hierarchy or have a specific datum; rather, buildings and structures were sited near one another based primarily on their functions. This causes the scale of the parcel to waver between human and monumental, because buildings and structures of different massing, forms, and size are located near one another.

The generating-station portion consists of three units and has a combined rated capacity of 577 megawatts (MW). Unit 1 and Unit 2 are both steam-electric–generating units, each capable of providing 215 MW of power. Unit 3 is a gas turbine unit rated at 130 MW. The MGS draws water via the Edison Canal to provide cooling for the plant's condensers and other necessary components. There are corresponding boilers, turbo-generators, cranes, feedwater tanks, and fuel storage tanks adjacent to the facility's units.

Aside from the large MGS structures, and in addition to small-scale storage and garage units, the property features two larger buildings: one for administrative needs, and the other for maintenance operations. The administration building is a rectangular, contemporary-style building with a flat roof and concrete-block walls. There is a flat, unadorned metal cornice that wraps around the majority of the building and projects outward at the entrance to create a covered entry porch. The main entry is comprised of double doors made of fixed-glass commercial window panes with metal trim. The maintenance building is to the north of the administration building across an asphalt paved parking lot. The maintenance building is utilitarian in style; has an irregular rectangular form; and is much larger than the administration building. It has a flat roof, concrete-block walls, and features the same metal cornice and exterior paint color as the administration building.

Mandalay-Santa Clara Transmission Line (P-56-153002) Update

The Mandalay-Santa Clara Transmission Line is the SCE-owned electric transmission line constructed to transmit power generated by the MGS to the Santa Clara Substation for ultimate distribution to communities in Ventura and Santa Barbara counties. The transmission line was constructed circa 1958, concurrent with the MGS and Edison Canal. The Mandalay-Santa Clara Transmission Line consists of the approximately 4.5-mile-long aboveground transmission line and associated transmission towers, posts, and wires. In 2010, a single pylon tower of the Mandalay-Santa Clara Transmission Line was recorded and subsequently assigned the primary number of P-56-153002.

Only the portion of the transmission line in the PAA was recorded and evaluated as part of this assessment. The portion outside of the PAA was not recorded, because the potential effects to the resource as a whole would be negligible. The assigned primary number was applied here because the single tower that was previously recorded (P-56-153002) is part of a longer linear resource (i.e., the Mandalay-Santa Clara Transmission Line). The portion of the Mandalay-Santa Clara Transmission Line in the PAA is comprised of four steel lattice towers: one tower in the MGS property, and the remaining three situated across Harbor Boulevard in the SCE-owned parcel that also holds the SCE substation (the line does not directly connect to the SCE substation). The towers stand approximately 150 feet tall, and rest on cylindrical poured-concrete pier foundations.

SCE Switchyard

The SCE Switchyard is the SCE-owned and operated switchyard facility in the historic architectural PAA immediately east of the MGS. The SCE Switchyard was constructed circa 1959 according to information provided by SCE, and distributes power from the MGS through the Mandalay-Santa Clara Transmission Line, eventually connecting to the Santa Clara Substation 15 miles northeast of the PAA. The SCE Switchyard has a north-south rectangular arrangement. The northern portion of the switchyard contains the majority of the steel-framed switchgear. There are four square, steel-framed structures distributing the power lines along a north-south axis through the switchyard, centered by a series of thin A-shaped steel towers. These power lines and corresponding circuit breakers, cylindrical power transformers, lightning arrestors, and metal-clad switchgear are all enclosed by a chain-link security fence topped with barbed wire. All of the equipment and structures are on concrete footings in the gravel-covered yard.

SCE Substation

The SCE Substation is an SCE-owned and -operated substation facility in the historic architectural PAA, across Harbor Boulevard from the MGS and SCE Switchyard, and in the same parcel through which the Mandalay-Santa Clara Transmission Line crosses. The SCE Substation was constructed to aid in the distribution of the power generated by the MGS to communities in the counties of Ventura and Santa Barbara. The SCE Substation was built in 1958, according to information provided by SCE.

The SCE Substation has a north-south rectangular arrangement. The northern portion of the substation contains a poured, board-formed concrete building one story tall with a flat roof. This building is the control house, which contains switchboard panels, batteries, battery chargers, supervisory control, power-line carrier, meters, and relays. To the immediate west of the control house is a tall, steel-framed microwave tower with four antennae. The power-line transmission and distribution of power flows north-south by the transmission buses, which are steel structure arrays of switches used to route the power; and the distribution buses, which are a steel structure array of switches used to route the power out of the substation. All the above-mentioned structures, as well as the power lines and corresponding circuit breakers, large rectangular power transformers, lightning arrestors, and metal-clad switchgear are enclosed by a chain-link security fence topped with barbed wire. All of the equipment and structures are on concrete footings in the gravel-covered yard.

Two additional single-story rectangular buildings, likely serving maintenance, storage, and security functions, are located in the substation. Both buildings are constructed of concrete and have flat roofs. The larger building has a metal overhanging awning and a metal door on the northern elevation. The smaller building has walls clad in aggregate brown pebbled concrete, and a metal door with a metal overhanging awning on the northern elevation. They are enclosed by a chain-link fence topped with barbed wire. Within the property along the northern perimeter are also cell tower equipment and other antennas.

Jeep Trail Tank Farm

The Jeep Trail Tank Farm is a privately owned storage tank farm, comprised of several horizontally and vertically laid tanks connected by several pumps and piping, located in the southeastern edge of a large rectangular parcel used primarily for agricultural purposes. The Jeep Trail Tank Farm is in the historic architectural PAA, approximately a quarter-mile northeast of the MGS, in the parcel immediately north of the SCE Substation.

The Jeep Trail Tank Farm currently is comprised of six cylindrical cone roof tanks and three cylindrical horizontally laid tanks, connected with an arrangement of pumps and piping. The tank farm is set on a poured-concrete foundation partially covered with dirt and earthen materials, along a bend in the dirt road (unpaved) known as the "Jeep Trail," per historic topographic maps and City of Oxnard records. The

tanks are concentrated in the southern portion of the parcel, and the rest of the parcel is characterized by three small agricultural fields on the western side of the parcel, and open areas of sand dunes and coastal vegetation on the eastern side of the parcel. The northeastern edge of the parcel contains various agricultural outbuildings that appear to be constructed within the past 30 to 40 years, and consist mostly of sheds, barns, and pavilions.

The Jeep Trail Tank Farm was built between approximately 1954 and 1959, based on review of historic aerials photographs. Five large upright tanks and small-scale structures first appear on the 1959 aerial photograph; and by 1967, two additional tanks have appeared in this location. By the 1977 aerial photograph, two of the tanks have been removed, and the photograph also depicts the initial grading/ clearing of the parcel's agricultural fields. The 1984 historic aerial photograph depicts the established agricultural fields north of the Jeep Trail Tank Farm, but only four upright tanks are now depicted. Between 1985 and the present, additional tanks have been added and/or replaced in this area.

4.3.2 Environmental Consequences

4.3.2.1 Significance Criteria

In considering impact significance under CEQA, the significance of the resource itself must first be determined. At the state level, consideration of significance as an "important archaeological resource" is measured by cultural resource provisions considered under CEQA Sections 15064.5 and 15126.4, and the criteria regarding resource eligibility to the CRHR.

Generally under CEQA, a historical resource (this includes historic architecture, as well as historic and prehistoric archaeological resources) is considered significant if it meets the criteria for listing on the CRHR. These criteria are set forth in CEQA Section 15064.5, and defined as any resource that:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage,
2. Is associated with lives of persons important in our past,
3. 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, or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Section 15064.5 of CEQA also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC Section 5097.98.

Impacts to "unique archaeological resources" are also considered under CEQA, as described under PRC 21083.2. A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that—without merely adding to the current body of knowledge—there is a high probability that it meets one of the following criteria:

(a) The archaeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information;
(b) The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
(c) The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A nonunique archaeological resource indicates an archaeological artifact, object, or site that does not meet the above criteria. Impacts to nonunique archaeological resources and resources that do not qualify for listing on the CRHR receive no further consideration under CEQA.

Under CEQA Section 15064.5, a project potentially would have significant impacts if it would cause substantial adverse change in the significance of one of the following:

(a) A historical resource (i.e., a cultural resource eligible for the CRHR)
(b) An archaeological resource (defined as a unique archaeological resource that does not meet CRHR criteria)
(c) A unique paleontological resource or unique geologic feature (i.e., where the project would directly or indirectly destroy a site or resources)
(d) Human remains (i.e., where the project would disturb or destroy burials)

A nonunique archaeological resource is given no further consideration, other than the simple recording of its existence, by the lead agency.

Potential impacts to identified cultural resources need only be considered if the resource is an "important" or "unique archaeological resource" under the provisions of CEQA Sections 15064.5 and 15126.4 and the eligibility criteria. If a resource cannot be avoided, then the resource must be examined pursuant to the provisions of CEQA Sections 15064.5 and 15126.4 and of the eligibility criteria as an "important" or "unique archaeological resource." In many cases, determination of a resource's eligibility can only be made through extensive research and archaeological testing. No mitigation measures are required unless previously undiscovered cultural resources are detected. Mitigation under CEQA must address impacts to the values for which a cultural resource is considered important. To mitigate adequately, it must therefore be determined what elements make a site eligible for the CRHR. The first line of mitigation is complete avoidance, when feasible, of all cultural resources.

4.3.2.2 Archaeological Resources Evaluation

No archaeological resources were identified within the P3 PAA, as defined for archaeological resources.

Today, this general location is in an environment that has been heavily disturbed by SCE's construction activities associated with the development of the original MGS. Archival research indicates that several feet of soil were removed from the original land surface to construct the original MGS. Further excavation occurred at the P3 site for the placement of the Geotubes as part of the canal-dredging project (Eagle North America, 2003). Field examination reveals that perhaps up to 1 foot or more of the dredge material remains in the P3 site.

Although no evidence of archaeological resources were identified in the archaeological PAA defined for P3, it is nonetheless possible that with project implementation, previously undiscovered archaeological resources could be inadvertently exposed during construction activities. Unless properly evaluated and managed, this could result in a significant impact to cultural resources. Impacts would be less than significant with implementation of the mitigation measures identified in Section 4.3.4.

4.3.2.3 Historic Architectural Resources Evaluation

As described below, none of the built environment resources surveyed meets the criteria for listing in the CRHR, and none are historical resources for the purposes of CEQA. Therefore, the proposed project would have no impact on historic architectural resources.

Summaries of the evaluations for each historic architectural resource are provided below. The full evaluations are included in the technical report in Appendix E-2.

4.3.2.3.1 Edison Canal

Under CRHR Criterion 1, the evaluated portion of the Edison Canal in the PAA has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Although the canal is associated with the construction of the largest single generating unit in the Edison system in the 1950s and 1960s, as well as being the first in the world to use selective catalytic reduction technology to minimize emissions, the generating plant and canal is just one example among many steam-generating power plants constructed by electric companies in the Los Angeles Basin. The construction of the canal did not spur community development in the Mandalay Beach area; rather, it was constructed as a result of the post-WW II population boom experienced in the Oxnard area (creating a greater need for power service). In addition, the Edison Canal does not retain any high potential as a historic or interpretive site in the PAA. Therefore, the Edison Canal is not eligible for the CRHR under Criterion 1 as an individual resource, or as a contributor to a larger significant linear resource (like the entire Edison Canal alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 2, the evaluated portion of the Edison Canal has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the Edison Canal is associated with any notable persons associated with water planning or their work. It was developed by staff at Bechtel and SCE, and no prominent people associated with these groups have a direct link with the canal; and more importantly, the canal (as a small-scale feature) would not convey or represent the significance of any individuals. Therefore, the Edison Canal is not eligible for the CRHR under Criterion 2 as an individual resource, or as a contributor to a larger significant linear resource (like the entire Edison Canal alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 3, the evaluated portion of the Edison Canal in the PAA does not embody the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possess high artistic values. The Edison Canal is not the earliest, best preserved, largest, or sole surviving example of a water intake for a steam-generating power plant. It does not represent a particular or important method of construction; rather, the canal was initially quickly and roughly excavated to allow for the on-schedule completion of the MGS, and is similar to numerous earthen canals when it was built. The canal was later lined with concrete, and then resembled other concrete-lined canals throughout the state (MBC Applied Environmental Sciences, 2001). Therefore, Edison Canal is not eligible for the CRHR under Criterion 3 as an individual resource, or as a contributor to a larger significant linear resource (like the entire Edison Canal alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 4, the evaluated portion of the Edison Canal in the PAA has not yielded—and does not appear to have the potential to yield—information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the canal. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, the Edison Canal is not eligible for the CRHR under Criterion 4.

4.3.2.3.2 Mandalay Generating Station

Under CRHR Criterion 1, the MGS has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Although the power station is associated with the construction of the largest single generating unit in the Edison system in the 1950s and 1960s, as well as first in the world to use selective catalytic reduction technology to minimize emissions, the generating plant is just one example among many of the popularity of constructing steam-generating power plants by electric companies in the Los Angeles Basin. At the time of its construction, the plant was one of several being built of similar—often nearly identical—design by SCE after WW II to supply the growing post-war demand for electricity in southern California. During the period in which the MGS

was built, SCE built a series of very similar steam plants in the Los Angeles Basin and in San Bernardino County. In addition to SCE, other companies throughout California, including Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), and California Electric, were also building similar steam-generating plants at this time to meet energy demands. In addition, although the MGS was important to the customers it served, it was one of many such power plants built during this era of tremendous growth that served essentially the same function, and this single plant does not stand out as particularly important in the SDG&E system or electrical generating development in the southern California region or the state as a whole. Therefore, MGS is not eligible for the CRHR under Criterion 1.

Under CRHR Criterion 2, the MGS has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the MGS is associated with any notable persons associated with steam-generating plant planning, construction, or engineering or their work. Therefore, MGS is not eligible for the CRHR under Criterion 2.

Under CRHR Criterion 3, the MGS does not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values. This facility (including Units 1 and 2, contained within the power plant building, Unit 3 as it stands, as well as the maintenance and administrative buildings and associated structures) was constructed as a steam-generating power plant, a design that was standard and common for the period and was built for expansion. Nothing about the design or construction of the MGS was unique, or required groundbreaking or innovative features to surmount engineering or design challenges. Additionally, the buildings on the property are generally common, utilitarian types built of concrete or prefabricated metal. They exhibit priority of function over style, and lack architectural distinction. Therefore, MGS is not eligible for the CRHR under Criterion 3.

Under CRHR Criterion 4, the MGS has not yielded nor appears to have the potential to yield information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the MGS. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, MGS is not eligible for the CRHR under Criterion 4.

4.3.2.3.3 Mandalay-Santa Clara Transmission Line (P-56-153002)

Under CRHR Criterion 1, the portion of the Mandalay-Santa Clara Transmission Line in the PAA has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Although the transmission line is associated with the construction of the largest single generating unit in the Edison system in the 1950s and 1960s, as well as the trend of using AC currents to distribute power throughout Southern California, the transmission line is just one example among many of transmission lines used by the SCE in Southern California. At the time of its construction, the transmission line was one of several being built of similar—often nearly identical — design by SCE to supply the growing demand for electricity in southern California. In addition to SCE, other companies throughout California, including PG&E, SDG&E, and California Electric, were also building similar transmission lines at this time to meet energy demands. Therefore, the Mandalay-Santa Clara Transmission Line is not eligible for the CRHR under Criterion 1 as an individual resource, or as a contributor to a larger significant linear resource (like the entire transmission line alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 2, the portion of the Mandalay-Santa Clara Transmission Line in the PAA has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the Mandalay-Santa Clara Transmission Line is associated with any notable persons associated with steam generating plant planning, construction, or engineering or their work. Therefore, the transmission line is not eligible for the CRHR under Criterion 2 as an

individual resource, or as a contributor to a larger significant linear resource (like the entire transmission line alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 3, the portion of the Mandalay-Santa Clara Transmission Line in the PAA does not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values. In addition, all of the associated structures such as transmission towers, poles, and wires were also typical for this type of linear resource. Nothing about the design or construction of the portion of the Mandalay-Santa Clara Transmission Line in the PAA was unique, or required groundbreaking or innovative features to surmount engineering or design challenges. Therefore, the transmission line is not eligible for the CRHR under Criterion 3 as an individual resource, or as a contributor to a larger significant linear resource (like the entire transmission line alignment), if it is ever determined such a resource may exist.

Under CRHR Criterion 4, the portion of the Mandalay-Santa Clara Transmission Line in the PAA has not yielded nor appears the potential to yield information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the Mandalay-Santa Clara Transmission Line. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, the transmission line is not eligible for the CRHR under Criterion 4 as an individual resource or as a contributor to a larger significant linear resource (like the entire transmission line alignment), if it is ever determined such a resource may exist.

4.3.2.3.4 SCE Switchyard

Under CRHR Criterion 1, the SCE Switchyard has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Although the switchyard is associated with the construction of the largest single generating unit in the Edison system in the 1950s and 1960s, as well as the trend of using AC currents to distribute power throughout Southern California, the switchyard is just one example among many of switchyards used by the SCE in Southern California. At the time of its construction, the switchyard was one of several being built of similar—often nearly identical—design by SCE to supply the growing demand for electricity in southern California. In addition to SCE, other companies throughout California, including PG&E, SDG&E, and California Electric, were also building similar switchyards at this time to meet energy demands. Therefore, the switchyard is not eligible for the CRHR under Criterion 1.

Under CRHR Criterion 2, the SCE Switchyard has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the SCE Switchyard is associated with any notable persons associated with steam-generating plant planning, construction, or engineering or their work. Therefore, the switchyard is not eligible for the CRHR under Criterion 2.

Under CRHR Criterion 3, the SCE Switchyard does not embody the distinctive characteristics of a type, period, region, or method or construction, or represent the work of a master, or possess high artistic values. Nothing about the design or construction of the SCE Switchyard was unique, or required groundbreaking or innovative features to surmount engineering or design challenges. Therefore, the switchyard is not eligible for the CRHR under Criterion 3.

Under CRHR Criterion 4, the SCE Switchyard has not yielded nor appears to have the potential to yield information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the SCE Switchyard. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, the switchyard is not eligible for the CRHR under Criterion 4.

4.3.2.3.5 SCE Substation

Under CRHR Criterion 1, the SCE Substation has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Although the substation is associated with the construction of the largest single generating unit in the Edison system in the 1950s and 1960s, as well as the trend of using AC currents to distribute power throughout Southern California, the substation is just one example among many of switchyards used by the SCE in Southern California. At the time of its construction, the substation was one of several being built of similar—often nearly identical—design by SCE to supply the growing demand for electricity in southern California. In addition to SCE, other companies throughout California, including PG&E, SDG&E, and California Electric, were also building similar substations at this time to meet energy demands. Therefore, the substation is not eligible for the CRHR under Criterion 1.

Under CRHR Criterion 2, the SCE Substation has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the SCE Substation is associated with any notable persons associated with steam-generating plant planning, construction, or engineering, nor their work. Therefore, the substation is not eligible for the CRHR under Criterion 2.

Under CRHR Criterion 3, the SCE Substation does not embody the distinctive characteristics of a type, period, region, or method or construction, or represent the work of a master, or possess high artistic values. Nothing about the design or construction of the SCE Substation was unique, or required groundbreaking or innovative features to surmount engineering or design challenges. Therefore, the substation is not eligible for the CRHR under Criterion 3.

Under CRHR Criterion 4, the SCE Substation has not yielded nor appears to have the potential to yield information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the SCE Substation. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, the substation is not eligible for the CRHR under Criterion 4.

4.3.2.3.6 Jeep Trail Tank Farm

Under CRHR Criterion 1, the Jeep Trail Tank Farm has no significant association with the broad patterns of local or regional history, or the cultural heritage of California or the U.S. Many rural properties contain landscape characteristics related to agricultural and mixed land uses and practices, such as power generation and small-scale oil and gas storage uses. This property has been associated with oil and gas small-scale storage since 1959 (at the latest), and has also been used for agricultural purposes since the 1970s. Overall, these events either occurred much later than when agricultural activities were occurring in Ventura County, or the oil and gas storage activities in this parcel were at a much smaller scale than elsewhere in the County at this time (like at the MGS plant, in comparison). Therefore, this property is neither associated with nor is considered a distinctive representation of any of the significant events important to the County, or activities directly associated with improving the area's economy, productivity, or identity. Although the property resembles an agricultural parcel with a small power storage use from the 1950s through the 1970s, it lacks a distinctive appearance that conveys this association and theme. The property is just one example among many similar examples of tank farms in agricultural properties used by landowners, farmers, and other companies to store and produce small-scale oil and gas activities in Southern California. Therefore, this property is not eligible for the CRHR under Criterion 1.

Under CRHR Criterion 2, the Jeep Trail Tank Farm has no significant association with the lives of persons important to local, California, or national history. Research on the property did not reveal that the Jeep Trail Tank Farm is associated with notable persons associated with agricultural production, or that

were pioneers in the oil and gas industry or their work. Therefore, this property is not eligible for the CRHR under Criterion 2.

Under CRHR Criterion 3, the Jeep Trail Tank Farm does not embody the distinctive characteristics of a type, period, region, or method or construction, or represent the work of a master, or possess high artistic values. Based on the review of the *NPS National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes*, the Jeep Trail Tank Farm does not appear to be eligible as a rural historic landscape. The agricultural portion of the parcel was developed in the 1970s, and is therefore ineligible for evaluation as a historic property. Nothing about the design or construction of the Jeep Trail Tank Farm was unique, or required groundbreaking or innovative features to surmount engineering or design challenges. Therefore, this property is not eligible for the CRHR under Criterion 3.

Under CRHR Criterion 4, the Jeep Trail Tank Farm has not yielded, nor appears to have the potential to yield information important to the prehistory or history of the local area, California, or the nation. Research has indicated that no known events of importance occurred in relation to the Jeep Trail Tank Farm. The resource is not likely to yield information important to the prehistory or history of the local area, California, or the nation. Therefore, this property is not eligible for the CRHR under Criterion 4.

4.3.3 Cumulative Impacts Analyses

Of the cumulative projects identified in Section 4.0, no projects are in P3's PAA for archaeological resources, and only one project (North Shore Subdivision) is in the PAA for historic architectural resources. Given that project implementation would not result in effects to known important cultural resources, it is unlikely that the project could have significant cumulative effects to cultural resources. As noted above; however, it is possible that previously undiscovered archaeological resources may be exposed during construction activities. Unless properly evaluated and managed, this could result in a cumulative effect to such inadvertently exposed resources. Potential impacts resulting from P3 would be reduced to less than significant with implementation of mitigation measures described in the next section. Because similar measures to minimize potential impacts to archaeological resources would be implemented during construction of the North Shore Subdivision (Impact Sciences, Inc., 1998), this project would not be expected to have significant impacts on archaeological resources. Therefore, cumulative impacts to cultural resources are expected be less than significant.

4.3.4 Mitigation Measures

Measures to manage cultural resources in accordance with applicable laws and regulations are described below. With implementation of the measures listed below, potential impacts to cultural resources would be reduced to less-than-significant levels.

No historic resources, archaeological or historic architectural, have been identified in the PAAs defined for the project. Therefore, the mitigation measures below are focused on the inadvertent discovery of buried archaeological resources during project implementation.

CUL-1 Retain a Qualified Professional Archaeologist

Prior to the start of earth-disturbing activities, including vegetation clearance and site preparation, a qualified professional archaeologist will be retained by the Applicant as the cultural resources specialist (CRS). The CRS will be responsible for implementation of Mitigation Measures CUL-2 through CUL-7.

CUL-2 Provide Project Relevant Project Documents to CRS

Prior to the start of earth-disturbing activities, the Applicant will provide the CRS with Section 4.3 of the AFC and the confidential archaeological technical report (AECOM, 2015a) that were prepared for the

project, including all appendices. The Applicant will also provide the CRS with maps and drawings showing the footprint of the power plant, all linear facilities, access roads, and laydown areas where earth-disturbing activities are proposed.

CUL-3 Prepare a Cultural Resources Monitoring and Mitigation Plan

Prior to the start of earth-disturbing activities, the CRS will prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP). The CRMMP will identify general and specific measures to minimize potential impacts to sensitive cultural resources. The CRMMP will identify those activities requiring monitoring, those locations within the P3 site where monitoring is necessary, and the depth at which monitoring is no longer required. The Applicant will submit the CRMMP to the CEC for approval. No ground disturbance shall occur prior to approval of CRMMP unless specifically approved by the CEC. The approved CRMMP shall be implemented by the CRS.

CUL-4 Prepare a Cultural Resources Report

Following commissioning of P3, the CRS will prepare a Cultural Resources Report (CRR). The CRR will report on all field activities, including dates, times and locations, findings, samplings, and analysis. All survey reports, DPR 523 forms, and additional research reports not previously submitted to the CEC will be included as an appendix to the CRR. The Applicant will submit the CRR to the CEC for final approval. Upon final approval, the CRR will be submitted to CHRIS for permanent filing.

CUL-5 Worker Environmental Awareness Program

Prior to and for the duration of earth-disturbing activities, the Applicant will provide Worker Environmental Awareness Program training to all new workers within their first week of employment. The training will be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS will be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when earth-disturbing activities are completed or suspended, but will be resumed when ground disturbance, such as landscaping, resumes.

CUL-6 Curation Agreement

Prior to the start of earth-disturbing activities, the CRS will procure a curation agreement with a public repository or museum that meets the standards and requirements for the curation of cultural resources set forth at Title 36 of the Federal Code of Regulations, Part 79. At the expense of the Applicant, any cultural materials collected (as outlined in the CRMMP) will be curated in accordance with the State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections," into a retrievable storage collection in the public repository or museum.

4.3.5 Laws, Ordinances, Regulations, and Standards

P3 will be constructed and operated in accordance with all LORS applicable to cultural resources. Federal, state, and local LORS applicable to cultural resources are discussed below, and summarized in Table 4.3-6, Applicable Laws, Ordinances, Regulations, and Standards.

4.3.5.1 Federal

Federal LORS pertaining to the protection of cultural resources only apply to projects on federally owned or managed lands, federally funded projects, or projects subject to federal approval, and therefore are not applicable to P3.

4.3.5.2 State

State regulations pertaining to the protection of cultural resources, as guided by CEQA, are described under Section 4.3.2 above.

4.3.5.2.1 California Coastal Commission

The California Coastal Commission has regulatory control over all licensed, permitted, or assisted activities, wherever they may occur, if the activity affects coastal resources. Regulation is accomplished primarily through the preparation of Local Coastal Programs. The California Coastal Act (PRC, Division 20), Chapter 3, Article 5 (land resources), Section 30244 (archaeological and paleontological resources) states: "where development would adversely impact archaeological or paleontological resources as identified by the State Historical Preservation Officer, reasonable mitigation will be required."

4.3.5.3 Local

4.3.5.3.1 County of Ventura General Plan Goals, Policies, and Progress (2011)

This portion of the General Plan recognizes the importance of cultural resources on lands over which the County of Ventura has jurisdiction, and outlines goals, policies, and procedures for managing these resources. The County has developed specific requirements for the protection of cultural resources and mitigation of potential impacts to such resources.

4.3.5.3.2 City of Oxnard Code Chapter 37, Sec. 37-3.6.0 Cultural Resources and Development (2004)

The purpose of this section is to provide standards designed to avoid or minimize the impact of new development on a cultural resource in the coastal zone in a manner consistent with the standards contained in this section and other general and specific coastal development; and resources standards contained in this chapter, as well as all applicable provisions and policies of the Oxnard Coastal Land Use Plan (Ord. No. 2034, pt. 1, 2-12-85).

4.3.5.3.3 City of Oxnard 2030 General Plan Goals and Policies (2011)

The City of Oxnard's General Plan contains several goals and objectives pertinent to the preservation of cultural resources. This portion of the General Plan outlines guidelines for the designation and preservation of historic resources in the City of Oxnard. The section contains a listing of historic resources that are suitable candidates for preservation, criteria for evaluation of historical significance, and programs to minimize the alteration and prevent the destruction of significant historic resources.

4.3.6 Involved Agencies and Agency Contacts

Unless consultation with SHPO becomes necessary, the NAHC is the only agency involved with the management of cultural resources for the project. Appendix E-1 contains the correspondence with the NAHC concerning this particular project.

4.3.7 Permits Required and Permit Schedule

Other than certification from the CEC, no state, federal, or local permits are required by the project for the management of cultural resources.

4.3.8 References

AECOM, 2015a. Archaeological Resources Technical Report for the Puente Power Project. Prepared by AECOM. On file at AECOM, San Francisco, California.

AECOM, 2015b. Historic Architectural Resources Technical Report for the Puente Power Project. Prepared by AECOM. On file at AECOM, San Francisco, California.

CEC (California Energy Commission), 2008. California Code of Regulations, Title 20. Public Utilities and Energy Division 2. State Energy Resources Conservation and Development Commission.

Eagle North America, 2003. Processing and Stockpile Plan Manalay (sic) Intake Canal Dredging. Plan prepared for Reliant Energy, Houston, Texas.

EDR, 2015. EDR Historical Topographic Maps Report and Historic Aerial Photo Decade Package for the Mandalay Energy Center Project Site, Inquiry Numbers 4185537.4 and 4185537.12. Sheldon.

Electrical West, 1929. "1928 Steam Plants Account for 45 Percent of New Generating Capacity," Electrical West. February 2.

Impact Sciences, Inc., 1998. North Shore at Mandalay Bay Draft Environmental Impact Report, Vol. I. Prepared for the City of Oxnard, Community Development Department. Oxnard.

LAPL (Los Angeles Public Library). Sanborn Fire Insurance Maps. Available online at: http://sanborn.umi.com.ezproxy.lapl.org/nav_iMGS/titlebar.gif. Accessed February 20.

MBC Applied Environmental Sciences, 2001. Reliant Energy Mandalay Generating Station: Marine Mammal Protection Act Small Take Permit Application. Prepared for Reliant Energy. Oxnard.

Moratto, Michael J., 1984. *California Archaeology*. New York: Academic Press.

NPS (National Park Service), 1983. Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

Ventura County Star-Free Press, 1957a. "On Edison Co. Steam Station." April 6.

Ventura County Star-Free Press, 1957b. "Work Starts at Steam Plant Site." April 8.

Ventura County Star-Free Press, 1957c. "Multi-Million Dollar Plant Taking Shape." August 14.

Ventura County Star-Free Press, 1958a. "Sea Conversion Plant Set: Edison Mandalay Facility Will Be First of Its Kind." August 26.

Ventura County Star-Free Press, 1958b. "Steam Plant Takes Shape." September 2.

Ventura County Star-Free Press, 1958c. "Giant Generator for County." September 18.

Ventura County Star-Free Press, 1958d. "Edison Awards Contract for Water Plant." December 18.

Ventura County Star-Free Press, 1959a. "Huge Mandalay Steam Plant Starts Test Runs." February 20.

Ventura County Star-Free Press, 1959b. "New Mandalay Steam Station Now Operating." May 15.

Ventura County Star-Free Press, 1959c. "Pipeline will Transport Gas 58 Miles to Electric Plant." April 30.

Ventura County Star-Free Press, 1959d. "Edison Company Shows Off Mandalay Steam Plant." December 10.

Wallace, W.J., 1955. A suggested chronology for Southern California coastal archaeology. *Southwestern Journal of Anthropology* 11 (3): 214-230.

Wallace, W.J., 1978. Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *Handbook of North American Indians, Volume 8 California*. R.F. Heizer (ed.): 25-36. Washington DC: Smithsonian Institute Press.

Warren, C.N., 1968. Cultural tradition and ecological adaptation the southern California coast. In (C. Irwin-Williams, ed.) Archaic prehistory in the western United States. Portales: *Eastern New Mexico University Contributions in Anthropology* 1(3): 1-14.

Table 4.3-1
List of Reviewed Historic USGS Maps

Map Name	Scale (Inches:Feet)	Date
Camarillo	1:62,500	1904
Hueneme	1:62,500	1904
Southern California Sheet 3	1:250,000	1910
Hueneme	1:50,000	1947
Oxnard	1:24,000	1949
Oxnard	1:24,000	1951
Oxnard	1:24,000	1956
Oxnard	1:24,000	1967

Note:
USGS = United States Geological Service

Table 4.3-2
List of Reviewed Aerial Photographs

Year	Scale (Inches:Feet)	Source[1]
1947	1:500	USGS
1953	1:500	USGS
1959	1:500	Robinson
1967	1:500	USGS
1977	1:500	Teledyne
1984	1:500	USGS
1994	1:500	USGS/DOQQ
2005	1:500	USDA/NAIP
2009	1:500	USDA/NAIP
2010	1:500	USDA/NAIP
2012	1:500	USDA/NAIP

Notes:
[1] As found in the EDR Historic Aerial Photo Decade Package
DOQQ = digital orthophoto quarter quadrangle
NAIP = National Agriculture Imagery Program
USDA =U.S. Department of Agriculture
USGS = United States Geological Service
Source, EDR, 2015

Table 4.3-3
Previous Cultural Resource Investigations within the Records Search Radius

Report Number	Title	Author	Affiliation	Date	Proximity to Archaeological PAA	Proximity to Historic Architectural PAA
VN-00009	Proposed Widening of Harbor Boulevard From West Fifth Street to Channel Island Boulevard	Browne, Robert O.	Ventura County Archaeological Society	1973	Outside	Outside
VN-00236[1]	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease OCS P-0202 and P-0216, Offshore Southern California	Horne, Stephen	Dames &Moore	1980	Within	Within
VN-00385	Archaeological Monitoring Report: Union Oil Company Platform Gina and Platform Gilda Project, Ventura County, California	Wlodarski, Robert J.	Historical, Environmental, Archaeological, Research Team	1981	Outside	Within
VN-00398	Archaeological Monitoring Report for the Proposed Location of an 8 Montalvo Pipeline, Along Harbor Boulevard, Ventura County, California	Wlodarski, Robert J.	Historical, Environmental, Archaeological, Research Team	1981	Within	Within
VN-00414	An Archival and Background Cultural Resource Research Study for the Proposed Mandalay Beach Park, Ventura County, California	Wlodarski, Robert J.	Pence Archaeological Consulting	1982	Outside	Within
VN-00621	An Archaeological Reconnaissance of Portions of the Area Proposed for Mandalay State Beach Regional Recreation Park, Oxnard, Ventura County	Lopez, Robert	Robert Lopez, Archaeological Consultant	1986	Within	Within

Table 4.3-3
Previous Cultural Resource Investigations within the Records Search Radius
(Continued)

Report Number	Title	Author	Affiliation	Date	Proximity to Archaeological PAA	Proximity to Historic Architectural PAA
VN-00976	Cultural Resources Survey and Impact Assessment for the Proposed Realignment of the Doris Drain in the City of Oxnard, Ventura County, California	Singer, Clay A. and John E. Atwood	C.A. Singer & Associates, Inc.	1990	Outside	Outside
VN-00989	Cultural Resources Reconnaissance of Four Possible Sites for the California State University, Ventura Campus in Oxnard and Ventura, Ventura County, California	Bissel, Ronald M.	RMW Paleo Associates, Inc.	1990	Outside	Outside
VN-01475[1]	Cultural Resource Survey for McGrath State Beach	Hines, Philip and Jan Timbrook	California Department of Parks and Recreation	1986	Outside	Within
VN-01509[1/2]	Ventura Marina Dredging Project	Sturm, Bradley, L.	Army Corps of Engineers, Los Angeles District	1985	Within	Within
VN-01660	Phase I Archaeological Survey and Cultural Resources Assessment for the North Shore at Mandalay Bay Study Area, Ventura County, California	Simon, Joseph, M.	W & S Consultants	1997	Outside	Within
VN-01733[1/2]	Ventura Marina Dredging Project	Unknown	Army Corps of Engineers, Los Angeles District	1985	Within	Within
VN-02011	Phase I Archaeological Survey for the Coastal Zone/Soil Transfer Program Study Area, Coastal Berry Ranch, Ventura County, California	Unknown	W & S Consultants	2000	Outside	Outside

Table 4.3-3
Previous Cultural Resource Investigations within the Records Search Radius
(Continued)

Report Number	Title	Author	Affiliation	Date	Proximity to Archaeological PAA	Proximity to Historic Architectural PAA
VN-2014	Phase II Test Excavation and Determining of Significance of a Portion of CA-VEN-667, Oxnard, Ventura County, California	Whitley, David S. and Joseph Simms	W & S Consultants	1998	Outside	Within
VN-02474[1]	Request for SHPO Review of FCC Undertaking; Project Identifier: 5th & Harbor/ CA-7306c; Project Address: on an Existing Transmission Tower Adjacent to Harbor Boulevard North of 5th Street, Oxnard, California; County: Ventura County	Thal, Sean	EarthTouch, Inc.	2005	Outside	Within
VN-02809	A Phase 1 Archaeological Study Lots 1-12, of Map 5063 Located Northeast of the Intersection of Reef Way and Harbor Boulevard City of Oxnard, County of Ventura, California	Wlodarski, Robert J.	Historical, Environmental, Archaeological, Research Team	2010	Outside	Outside
VN-02901[1]	Cultural Resources Records Search, Site Visit Results, and Direct APE Historic Architecture Assessment for Clearwire Candidate CA-VT0119A (Mandalay-Santa Clara 1 and 2), 400 North Harbor Boulevard, Oxnard, Ventura County, California	Bonner, Wayne, Sarah Williams and Kathleen Crawford	Michael Brandman Associates	2010	Outside	Within
VN-2974	California Outer Continental Shelf, Archaeological Resource Study: Morro Bay to Mexican Border, Final Report	Pierson, Larry, Gerald Shiner and Richard Slater	PS Associates	1987	Outside	Within

Table 4.3-3
Previous Cultural Resource Investigations within the Records Search Radius (Continued)

Report Number	Title	Author	Affiliation	Date	Proximity to Archaeological PAA	Proximity to Historic Architectural PAA
VN-2978[1]	Groundwater Recovery Enhancement and Treatment (GREAT) Program, Cultural Resources Inventory Report	Sharpe, Jim and Lori Durio	CH2MHill	2004	Outside	Within
VN-03138*	McGrath State Beach – Sewer Force Main and Sewer Lift Station Replacement and Wet Well Conversion	Greenway, Brendon	California Department of Parks and Recreation	2012	Outside	Within

Notes:
[1] Referenced report contains a discussion of historic architecture.
[2] Further review of the records search results revealed that studies VN-001509 and VN-1733 are the same report.

FCC = Federal Communications Commission
PAA = Project Area of Analysis
SHPO = State Historic Preservation Officer

Table 4.3-4
Previously Identified Cultural Resources within the Records Search Area

Primary (P-56-###)	Trinomial (CA-VEN-###)	Site Type	Prehistoric/ Historic	NRHP/ CRHR Status	Proximity to the Archaeological PAA	Proximity to the Historic Architectural PAA
667	667	Shell Lenses Eroding from Sand Dune	Prehistoric	Not Evaluated	Outside	N/A
1234	1234	Purported Ethnographic *Juncus* spp. Collection Area	Prehistoric	Not Evaluated	Outside	N/A
1807	1807/H	Lithic and Debris Scatter	Prehistoric/ Historic	Not Evaluated	Outside	N/A
152738	N/A	Historic Residence: 1870 to 1920 McGrath House (Conway House).	Historic	Not Evaluated	N/A	Outside
1523002	N/A	Historic SCE Mandalay-Santa Clara 1 and 2 Transmission Tower constructed in 1958.	Historic	Determined ineligible for listing in the NRHP (Status Code 6Y)	N/A	Within

Notes:
CRHR = California Register of Historical Resources
NRHP = National Register of Historic Places
PAA = Project Area of Analysis
SCE = Southern California Edison

Table 4.3-5
Native American Consultation Information

Contact Name and Title	Native American Group(s) Represented	Date Contacted By Letter	Date Contacted by Telephone or Email	Comments Received/ Notes
Richard Angulo	Chumash	January 29, 2015	February 5, 2015 (incoming telephone call in response to written solicitation)	Mr. Angulo left a message via telephone with AECOM on February 4, 2015. AECOM returned call to Mr. Angulo the next day (February 5, 2015). He stated the project area is "very sensitive" and that a burial ground had been discovered and destroyed to the south of the project area. He then stated that he wanted it on the record that "if monitoring is to occur, he recommends that Patrick Tumamait be the monitor." He went on to say that "if Patrick does the monitoring, he has nothing to worry about."
Frank Arrendondo	Chumash	January 29, 2015	February 25, 2015 (email)	No response to date.
Sam Cohen Tribal Administrator/ Counsel	Chumash Santa Ynez Band of Mission Indians	January 29, 2015	N/A	See Mr. Romero's response.
Freddie Romero Cultural Preservation Consultant	Chumash Santa Ynez Tribal Elders Council	January 29, 2015	February 5, 2015	Mr. Romero contacted AECOM via telephone on February 4, 2015. AECOM returned call to Mr. Romero the next day (February 5, 2015). Mr. Romero stated that the Santa Ynez Band of Mission Indians had no comment on the project area; however, he wanted to confirm that AECOM had contacted other tribes in the vicinity, and that he would defer to them.

Table 4.3-5
Native American Consultation Information (Continued)

Contact Name and Title	Native American Group(s) Represented	Date Contacted By Letter	Date Contacted by Telephone or Email	Comments Received/ Notes
Carol A. Pulido	Chumash	January 29, 2015	No telephone number or email provided.	No response to date.
Kathleen Pappo	Chumash Barbareno/ Ventureno Band of Mission Indians	January 29, 2015	February 25, 2015 (Telephone)	Ms. Pappo had no comments on the project.
Melissa M. Parra Hernandez	Chumash	January 29, 2015	February 25, 2015 (email returned undeliverable) February 25, 2015 (telephone)	Left message, no response.
Raudel Joe Banuelos, Jr.	Chumash Barbareno/ Ventureno Band of Mission Indians	January 29, 2015 Package returned as unclaimed after attempts to deliver via certified mail on 2-20-15 and 2-25-15	February 25, 2015 (Telephone)	Left message, no response to date.
Janet Darlene Garcia	Chumash Coastal Band of the Chumash Nation	January 29, 2015	February 25, 2015 (Telephone)	Left message, no response to date.
Crystal Baker	Chumash Coastal Band of the Chumash Nation	January 29, 2015	February 25, 2015 (Telephone)	Left message with an unidentified person who answered the phone.
PeuYoKo Perez	Chumash	January 29, 2015	February 25, 2015 (email)	No response to date.
Beverly Salazar Folkes	Chumash, Tataviam, Fernandeno	January 29, 2015	March 4, 2015 (email)	No response to date.
Adelina Alva-Padilla Chairwoman	Chumash Santa Ynez Tribal Elders Council	January 29, 2015	N/A	See Mr. Romero's response.
Julie Lynn Tumamait/ Stennsile Chair	Chumash Barbareno/Ventureno Band of Mission Indians	January 29, 2015	March 4, 2015 (email)	No response to date.

Table 4.3-5
Native American Consultation Information (Continued)

Contact Name and Title	Native American Group(s) Represented	Date Contacted By Letter	Date Contacted by Telephone or Email	Comments Received/ Notes
Randy Guzman-Folkes	Chumash	January 29, 2015	March 4, 2015 (email)	No response to date.
Patrick Tumamait	Chumash Fernadeno Tatviam Shoshone Paiute Yaqui	January 29, 2015	February 3, 2015 (incoming telephone call in response to written solicitation)	Mr. Tumamait stated there are several sites in the area but that he had "no concerns in the direct vicinity."
Michael Cordero Chairperson	Chumash Coastal Band of the Chumash Nation	January 29, 2015	March 4, 2015 (email)	No response to date.
Stephen William Miller	Chumash	January 29, 2015	March 4, 2015 (telephone)	Left message, no response to date.
Charles S. Parra	Chumash	January 29, 2015	March 4, 2015 (telephone)	Phone numbers provided for Mr. Parra no longer in service.

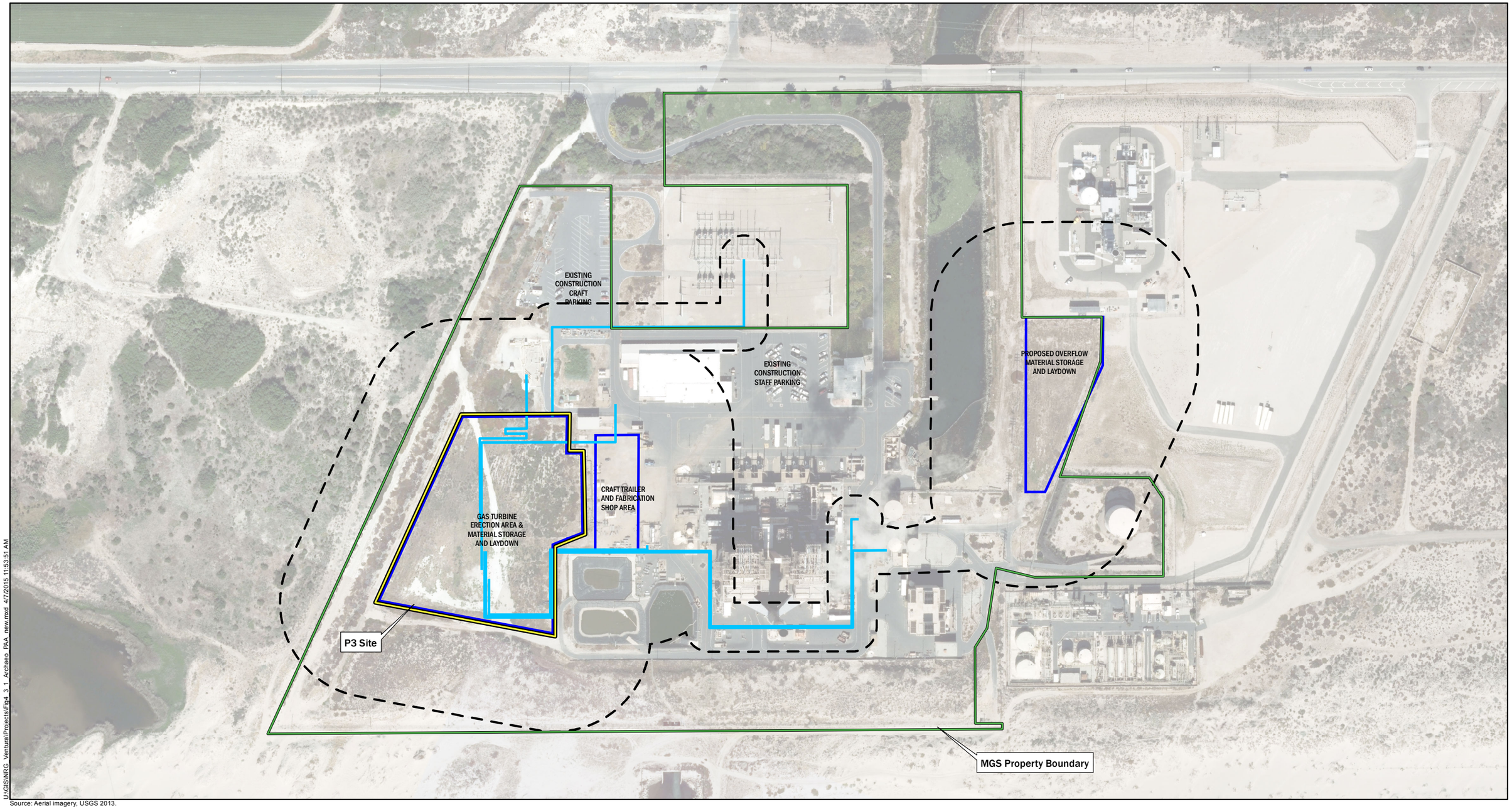
Table 4.3-6
Summary of Laws, Ordinances, Regulations, and Standards – Cultural Resources

LORS	Administering Agency	Applicability	AFC Section
State			
California Coastal Act	California Coastal Commission	For development in the coastal zone that would adversely impact archaeological resources as identified by the State Historical Preservation Officer, reasonable mitigation will be required.	4.3.1 – 4.3.4, 4.8
Local			
County of Ventura General Plan	Ventura County Planning Department	Development shall be designed to avoid impacts to significant cultural resources whenever possible, but unavoidable impacts shall be reduced to a less-than-significant level and/or shall be mitigated by extracting maximum recoverable data.	4.3.1 – 4.3.4, 4.8
City of Oxnard General Plan	City of Oxnard Planning Department	In the event that archaeological resources are discovered during site excavation, grading and construction work on the project site must be suspended until the significance of the features can be determined by a qualified archaeologist/ paleontologist	4.3.1 – 4.3.4, 4.8
City of Oxnard Code Chapter 37, Sec. 37-3.6.0 Cultural Resources and Development (2004)	City of Oxnard Planning Department	Provides standards designed to avoid or minimize the impact of new development upon a cultural resource within the coastal zone.	4.3.1 – 4.3.4, 4.8

Notes:
AFC = Application for Certification
LORS = Laws, Ordinances, Regulations, and Standards

Table 4.3-7
Involved Agencies and Agency Contacts

Issue	Agency	Contact/Title	Telephone	E-mail
City of Oxnard General Plan	City of Oxnard Department of Planning	Chris Williamson, Planner	(805) 385-8156	chris.williamson@ci.oxnard.ca.us
County of Ventura General Plan	County of Ventura Department of Planning	Rosemary Rowan	(805) 654-2461	rosemary.rowan@ventura.org
Coastal Commission policies on paleontological resources	California Coastal Commission South Central Coastal District	Denise Venegas, Planner	(805) 585-1800	denise.venegas@coastal.ca.gov
Native American traditional cultural properties	Native American Heritage Commission	Katy Sanchez Associate Government Program Analyst	(916) 373-3712	nahc@nahc.ca.gov



U:\GIS\NRG_Ventura\Projects\Fig4_3_1_Archaeo_PAA_new.mxd 4/7/2015 11:53:51 AM

Source: Aerial imagery, USGS 2013.

- Archaeological PAA (including CEC-mandated 200-foot buffer)
- Puente Power Project (P3) Site
- Mandalay Generating Station (MGS) Property
- Construction and Laydown Areas
- New Utility Line Route

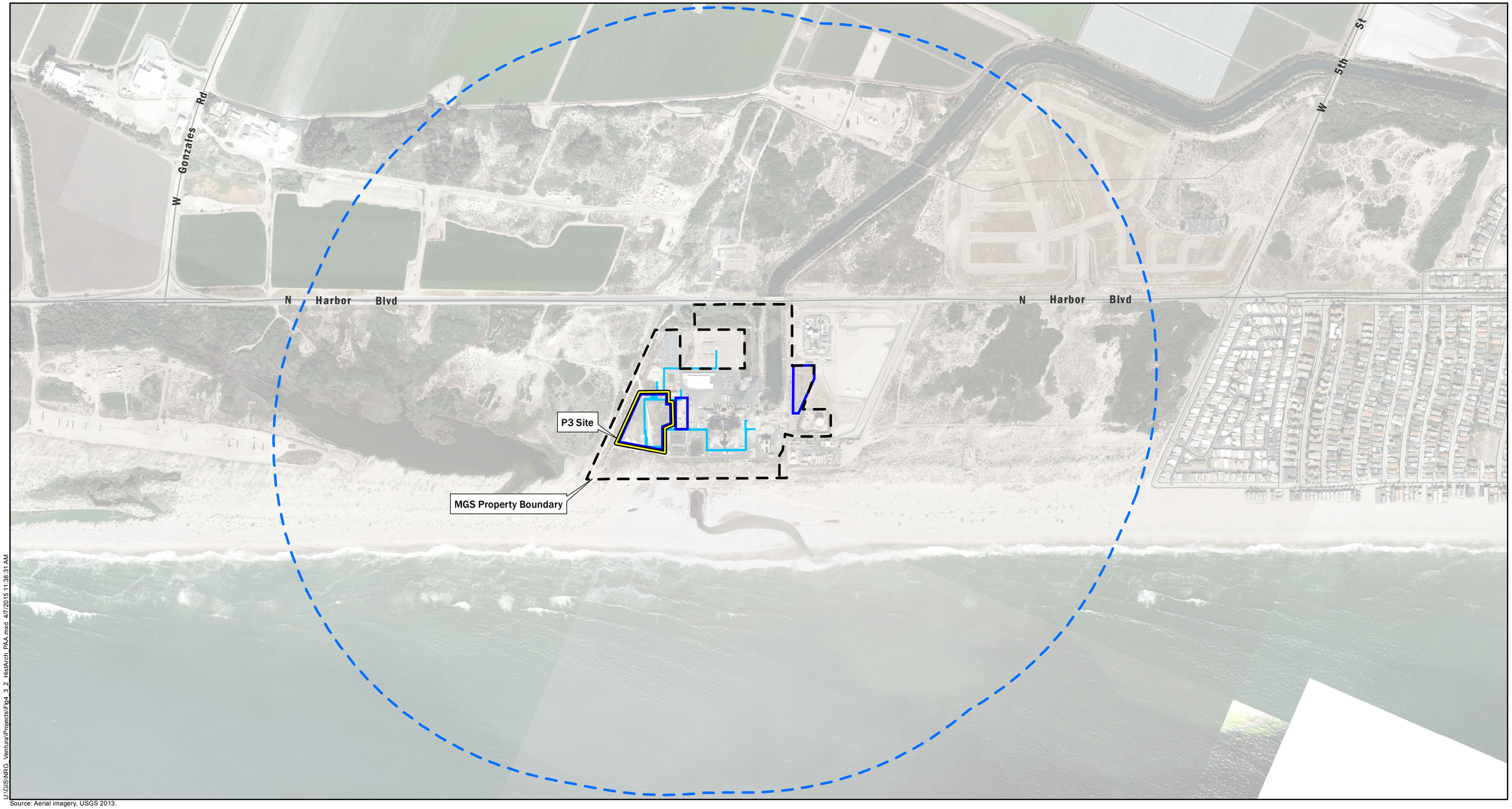
0 125 250 FEET

ARCHAEOLOGICAL PROJECT AREA OF ANALYSIS

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.3-1



U:\GIS\NRG_Ventura\Projects\Fig4 - 3_2_HistArch_PAA.mxd 4/7/2015 11:38:31 AM

Source: Aerial imagery, USGS 2013.

- Historic Architectural PAA (including CEC-mandated 0.5-mile buffer)
- Puente Power Project (P3) Site
- Mandalay Generating Station (MGS) Property
- Construction and Laydown Areas
- New Utility Line Route

0 400 800 FEET

HISTORIC ARCHITECTURAL PROJECT AREA OF ANALYSIS

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-2

U:\GIS\NRG_Ventura\Projects\Fig4_3_3_HistPhoto_1947.mxd 4/7/2015 11:57:46 AM

Source: Basemap, EDR Aerial Photo Package, 2015.

Puente Power Project (P3) Site

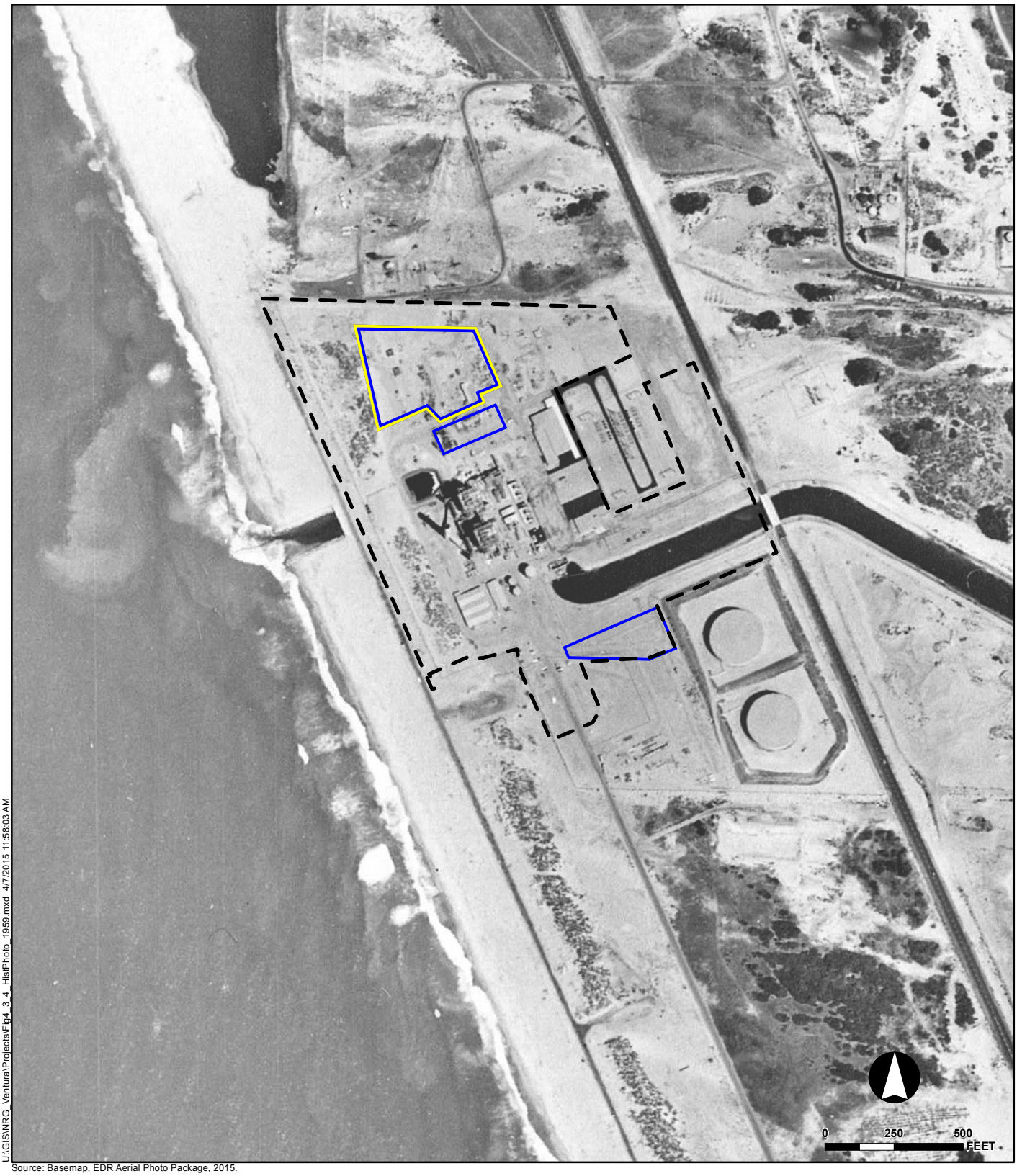
Construction and Laydown Areas

Mandalay Generating Station Property

HISTORICAL AERIAL — 1947

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-3



U:\GIS\NRG_Ventura\Projects\Fig4_3_4_HistPhoto_1959.mxd 4/7/2015 11:58:03 AM

Source: Basemap, EDR Aerial Photo Package, 2015.

Puente Power Project (P3) Site

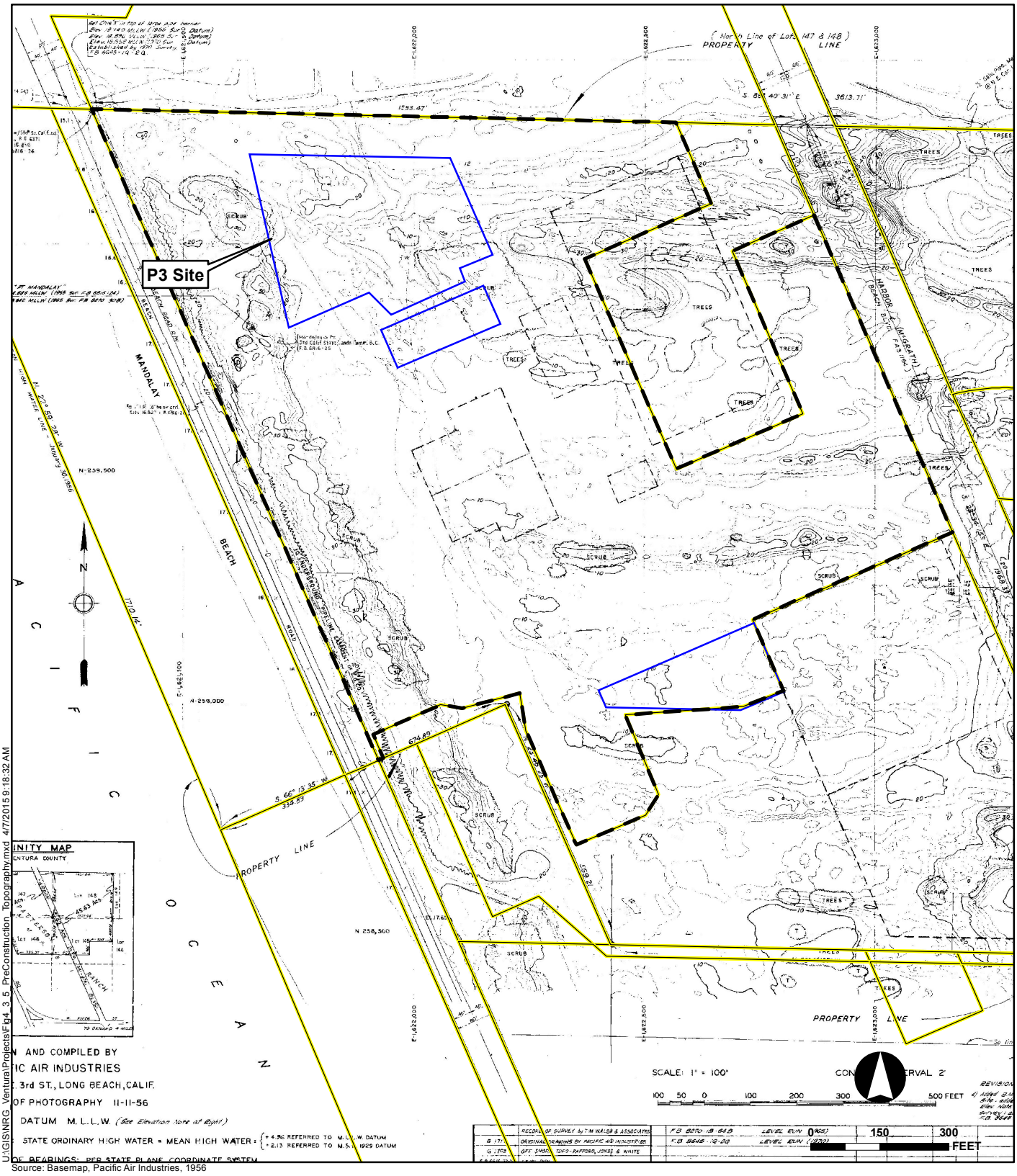
Construction and Laydown Areas

Mandalay Generating Station Property

HISTORICAL AERIAL — 1959

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-4



Source: Basemap, Pacific Air Industries, 1956

U:\GIS\NRG_Ventura\Projects\Fig4_3-5_PreConstruction_Topography.mxd 4/7/2015 9:18:32 AM

TOPOGRAPHY PRIOR TO MGS CONSTRUCTION

Project Components

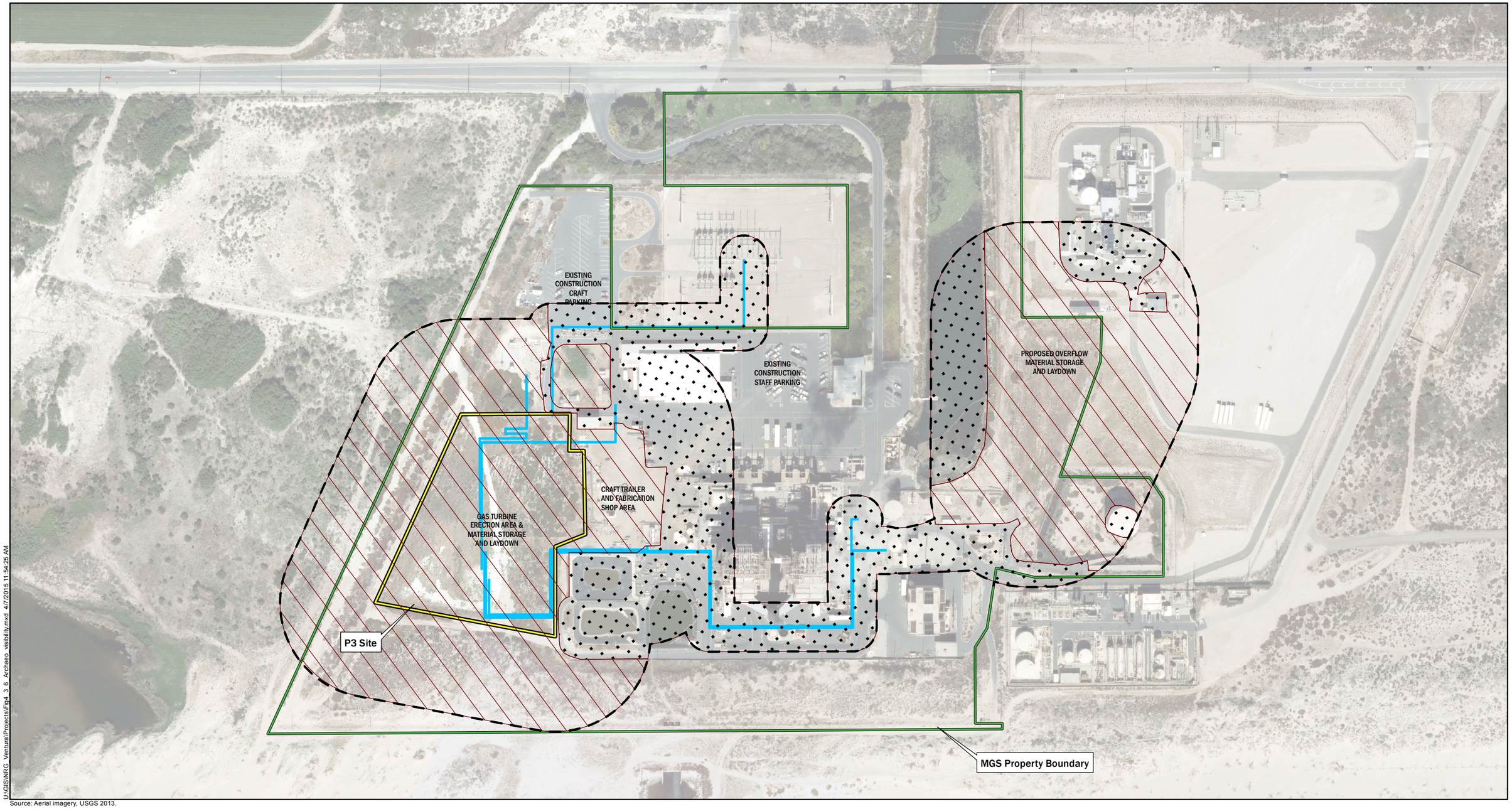
Mandalay Generating Station (MGS) Property

Parcel Boundary

NRG
Puente Power Project
Oxnard, California

April 2015

FIGURE 4.3-5



U:\GIS\NRG_Ventura\Projects\Fig4_3_6_Archaeo_visibility.mxd 4/7/2015 11:54:25 AM

Source: Aerial imagery, USGS 2013.

- Archaeological PAA (including CEC-mandated 200-foot buffer)
- Puente Power Project (P3) Site
- Mandalay Generating Station (MGS) Property
- New Utility Line Route
- Excellent Visibility
- Poor Visibility

0 125 250 FEET

SURFACE VISIBILITY IN ARCHAEOLOGICAL PROJECT AREA OF ANALYSIS

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-6

U:\GIS\NRG_Ventura\Projects\Fig4_3_7_HistPhoto_2005.mxd 4/7/2015 11:57:33 AM

Source: Basemap, EDR Aerial Photo Package, 2015.

Puente Power Project (P3) Site

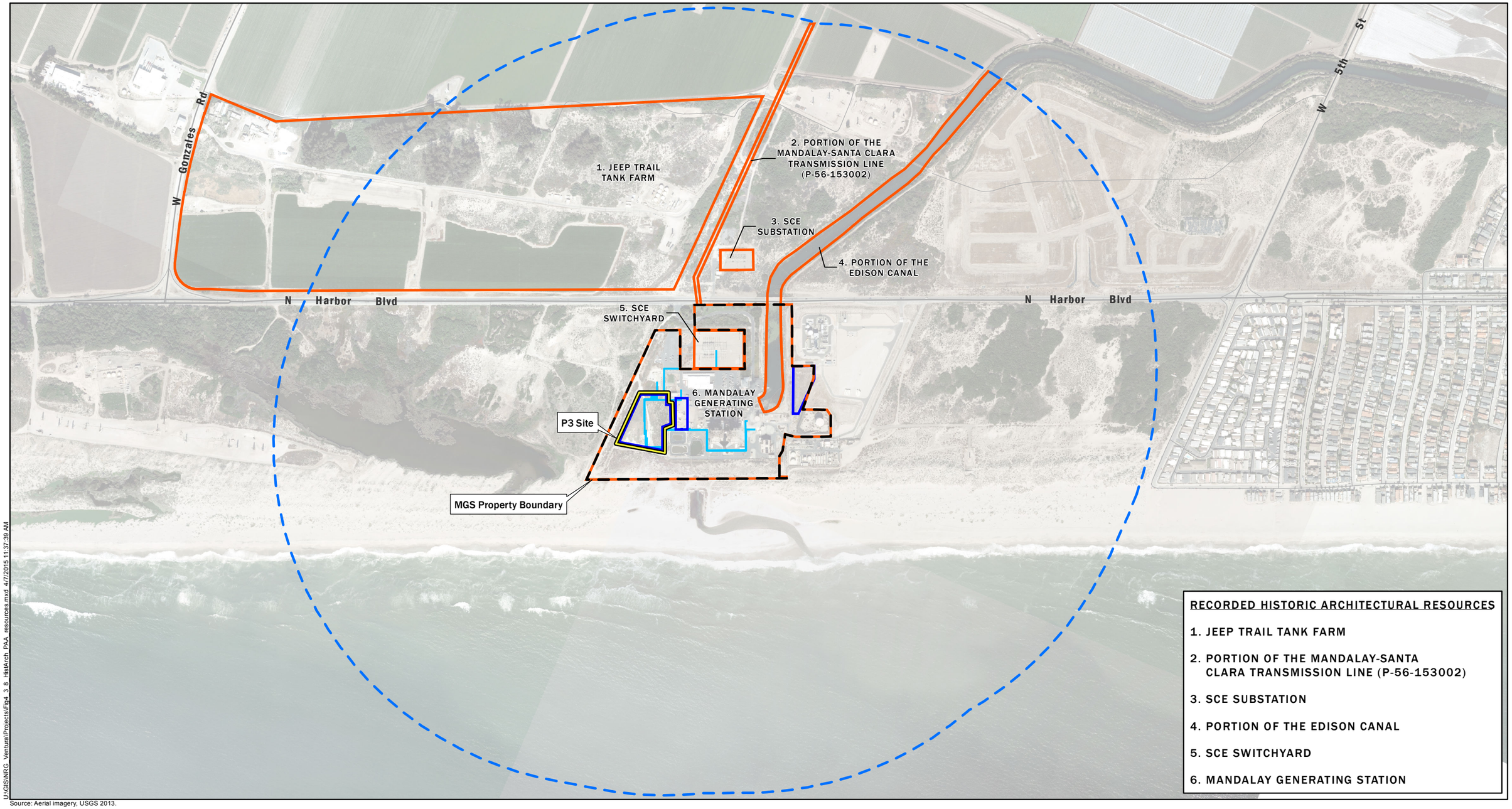
Construction and Laydown Areas

Mandalay Generating Station Property

HISTORICAL AERIAL — 2005

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-7



U:\GIS\NRG_Ventura\Projects\Fig4_3_8_HistArch_PAA_resources.mxd 4/7/2015 11:37:39 AM

RECORDED HISTORIC ARCHITECTURAL RESOURCES

1. JEEP TRAIL TANK FARM
2. PORTION OF THE MANDALAY-SANTA CLARA TRANSMISSION LINE (P-56-153002)
3. SCE SUBSTATION
4. PORTION OF THE EDISON CANAL
5. SCE SWITCHYARD
6. MANDALAY GENERATING STATION

Source: Aerial imagery, USGS 2013.

- Historic Architectural PAA (including CEC-mandated 0.5-mile buffer)
- Historic Architectural Resource Boundary
- Puente Power Project (P3) Site
- Mandalay Generating Station (MGS) Property
- Construction and Laydown Areas
- New Utility Line Route

0 400 800 FEET

HISTORIC ARCHITECTURAL RESOURCES IN THE PROJECT AREA OF ANALYSIS

NRG
Puente Power Project
April 2015 Oxnard, California

FIGURE 4.3-8