
IV. ENVIRONMENTAL IMPACT ANALYSIS

H. CULTURAL RESOURCES

INTRODUCTION

Incorporated into this section is information and analysis contained in the following document (see Appendix E):

- *A Cultural Resources Investigation*, prepared by Tom Origer & Associates, November 2010.

METHODOLOGY

The Cultural Resources Survey is designed to satisfy environmental issues specified in the CEQA Guidelines (Title 14 CCR Section 15064.5) by: (1) identifying all cultural resources within the project site; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.

ENVIRONMENTAL SETTING

Local Setting

The project site consists of approximately 2.13 acres of relatively flat land located between the confluence of two drainages that feed San Pedro Creek. The project site is flag-shaped and is bordered by Oddstad Boulevard to the east, Toledo Court and the Middle Fork of San Pedro Creek to the south, the North Fork of San Pedro Creek to the west, and a shopping center to the north, as shown on the Montara Mountain California 7.5' USGS topographic quadrangle. The Pacific Ocean is two miles west of the project site.

The terrain of the study area is generally flat. The project site terrain falls off to the south and the west as the property includes portions of the creeks and their banks. Introduced fill from the shopping center abuts the north boundary of the project site. Soils mapped for the study area are composed of Candlestick variant loams that are typically found on alluvial fans and are well drained.¹

The study area is located in an environment that would have been suitable for early inhabitants to live or gather resources, and therefore is considered sensitive for prehistoric cultural resources. Potentially attractive natural resources present during the prehistoric period would have included fresh water sources, including San Pedro Creek and its tributaries, located within the immediate vicinity of the project site. The Pacific Ocean, located two miles west of the

¹ *United States Department of Agriculture - Natural Resources Conservation Service, 2006.*

project site, provided a bounty of coastal resources for early inhabitants of the area including marine fish, marine mammals, shellfish, and waterfowl. Lastly, well-drained soils within the study area would have been attractive for either seasonal or permanent habitation.

Cultural Setting

Archaeological evidence indicates that human occupation of California began at least 10,000 to 15,000 years ago (Moratto 1984:71). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion.

Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the study area was included in the territory controlled by Ohlone, who are also referred to as the Costanoan (Levy 1978). The Ohlone were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Kroeber 1925; Levy 1978). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied continually throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons.

Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant. Based on baptismal records from the early 19th century, ethnographer Randall Milliken ascribes the *Chiquan* tribe to the area from Point Montara south to Pilarcitos Creek, which includes the present study area (Milliken 1995:239).

Historically, the study area is situated within the San Pedro Land Grant which was granted to Francisco Sanchez January 26, 1839 by Juan B. Alvarado (Alley 1883). An 1894 map of the county indicates that E. Schubert owned land in and surrounding the project site (Moore & DePue 1878). The 1894 map also shows a portion of the San Francisco and West Shore Railway passing just north of the project site, which follows present day Terra Nova Avenue.

Archaeological Resources

Archival research included examination of the library and project files at Tom Origer & Associates. A review (file No. NWIC File No. 10-0271) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University in Rohnert Park. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places,

California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2009).

The Office of Historic Preservation has determined that structures in excess of 45 years of age should be considered potentially important historical resources, and former building and structure locations could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area. Maps ranged from hand-drawn maps of the 1800s (e.g., General Land Office) to topographic maps issued by the United States Geological Survey (USGS) and United States Army Corps of Engineers (USACE).

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed (see Appendix E).

Archival research found that no previously recorded cultural resources are located within the project site. The current project site has not been subject to previous archaeological evaluation.

Three previously recorded architectural resources (P-41-000074, P-41-002208, and P-41-002217) are located within a one-mile radius of the project. The Sanchez Elementary School (P-41-002208), constructed circa 1958, is located approximately 1/2-mile to the west of the project. The elementary school was closed in 1983, abandoned for approximately ten years, and then converted to an arts center after being acquired by the City of Pacifica during the 1990s (Supernowicz 2001).

The Shamrock Ranch (P-41-002217) was recorded by Dobkin and Hill (2008) as part of the Devil's Slide Tunnel Shamrock Ranch Pipeline Project. The Shamrock Ranch, dating from the 1890s to the 1970s, is composed of a large complex of buildings spread over forty acres, located within 1/4-mile south of the current project.

The Sanchez Adobe (P-41-000074) is located one-mile northwest of the current project. The adobe was constructed between 1842 and 1846 by Francisco Sanchez, owner of the Rancho San Pedro and a leader of Mexican California who led volunteers against United States forces at the Battle of Santa Clara (San Mateo County History Museum 2010).

Historical maps show no buildings or structures within the project site between 1878 and 1956 (Moore and DePue 1878; Davenport & Bromfield 1894; USCGS 1918 and 1941; USGS 1949; USGS 1956 (photorevised 1980)).

Soils throughout the project site were silty and loamy with high concentrations of rounded gravels (~40%). No prehistoric or historic-era archaeological sites were found within the current project site.

The study area is located in an environment that would have been suitable for early inhabitants to live or gather resources, and therefore is considered sensitive for prehistoric cultural resources. Potentially attractive natural resources during the prehistoric period would have

included fresh water sources, including San Pedro Creek and its tributaries, adjacent to the project site. The Pacific Ocean, located two miles west of the project, provided a bounty of coastal resources for early inhabitants of the area including marine fish, marine mammals, shellfish, and waterfowl. Lastly, well-drained soils within the area would have been attractive for seasonal or permanent habitation.

The cultural resources study conducted at the site did not identify any archaeological resources through archival research or field survey.² The field survey method included inspection of soils along the south and west boundary of the project site within and above the creek banks for the presence of cultural resources. A 10 cm diameter hole was excavated to approximately 30 cm with a trowel to inspect subsurface soils. Archival research included review of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park.

Built Environment

Four wood-framed structures and an aluminum-framed carport canopy are located on the parcel. The four standing structures include a glass greenhouse, a warehouse, a barn, and a well with a wood panel housing. The warehouse and greenhouse are situated adjacent to one another and are located in the eastern portion of the project site. The warehouse is constructed with modern materials; however, re-used and recycled materials have been integrated into its construction, including multi-paned windows and doors. This was also noted on the barn, located in the south-central portion of the project site. It is possible that the four structures on the property are contemporary with the one-story residence on the adjacent parcel to the east (APN 023-593-150), which was built in 1963.³ A review of the 1956 USGS quadrangle map indicates no structures on the project site, or on the neighboring residential parcel to the east. However, the 1980 photo-revision indicates urban development within and around the project site.

Paleontological Resources

Paleontological resources are mineralized or fossilized remains of prehistoric plants and animals, as well as mineralized impressions or trace fossils that provide indirect evidence of the form and activity of ancient organisms. Paleontological resources or prehistoric fossils have been discovered in exposed bluffs above the ocean bench along the coast in San Mateo County. These sites contained molluscan fossils from the Pleistocene Period.⁴

² *Strouther and Origer 2010.*

³ *Parcel information collected from parcelquest.com, accessed November 29, 2010.*

⁴ *San Mateo County, Environmental Services Agency, Planning and Building Division, County of San Mateo General Plan, Chapter 5 - Historical and Archaeological Resources, November 1986, page 5.5.*

Native American Consultation

The State of California's Native American Heritage Commission (NAHC) was contacted on November 30, 2010, seeking information regarding possible sacred lands and other cultural sites within the area (Appendix E). Additionally, a list of Native American individuals whom would likely be interested in the project was requested from the NAHC. The Indian Canyon Mutsun Band of Costanoan responded to Tom Origer & Associates on January 10, 2011 and expressed concern about the general archaeological sensitivity of the area since it is located next to San Pedro Creek.⁵ The Indian Canyon Mutsun Band of Costanoan requested that a Native American monitor and an archaeological monitor be present at the project site during ground disturbing activities related to construction.

REGULATORY SETTING

Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA) are the basic federal and state laws governing preservation of historic and archaeological resources of national, regional, state and local significance.

Federal

Primarily Section 106 of the NHPA of 1966 governs federal regulations for cultural resources. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (National Register). The criteria for determining National Register eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or if it uses federal money.

⁵ Letter response to Tom Origer & Associates by Ms. Ann Marie Sayers of the Indian Canyon Mutsun Band of Costanoan.

State

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code Sections 20183.2 and 21084.1 and Section 15064.5 of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources (see the Historical Resources description below for criteria specifications).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associates and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains.

California Historic Register

The State Historic Preservation Office (SHPO) also maintains the California State Register of Historic Resources (CRHR). Properties that are listed on the National Register of Historic Properties (NRHP) are automatically listed on the CRHR, along with State Landmark and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Native American Consultation

SB-18 Tribal Consultation; Government Code Section 65352.3 (Senate Bill [SB] 18) requires local governments to consult with California Native American Tribes identified by the California NAHC regarding proposed local land use planning decisions and prior to the adoption or amendment of a general plan or specific plan. The purpose of this consultation is to preserve or mitigate impacts to cultural places.

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. In the event that human graves are encountered, work should halt in the vicinity and the County Coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the NAHC within 24 hours of this identification.

According to Section 15064.5 of the CEQA Guidelines, all human remains are a significant resource. Section 15064.5 of the CEQA Guidelines also assigns special importance to human

remains and specifies procedures to be used when Native American remains are discovered. These procedures are spelled out under Public Resources Code Section 5097.

Local

City of Pacifica General Plan

The General Plan Historical Preservation Element contains the following policies related to historical and archaeological resources that would be applicable to the proposed project:

Policies:

1. *Conserve historic and cultural sites and structures which define the past and present character of Pacifica.*
2. *Consider creative alternatives, which may include uses other than the original use, to protect and preserve historic sites and structures.*
3. *Public awareness and education programs shall be considered essential for historic conservation.*
4. *Encourage all public agencies to continue and increase their support for local historic sites of County, State and National significance in Pacifica.*

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on Appendix G to the State CEQA Guidelines, the proposed project would result in a significant environmental impact on cultural resources if it would:

- a) Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- d) Disturb any human remains, including those interred outside of formal cemeteries.

For purposes of CEQA, to determine whether cultural resources could be significantly affected, the significance of the resource itself must first be determined. Section 15065 of the CEQA Guidelines mandates a finding of significance if a project would eliminate important examples of major periods of California history or prehistory.

Cultural Resources Issues not Further Analyzed

The following issues were addressed in the Initial Study (see Appendix A) and Section IV.A of the Draft EIR and were determined to result in no impact or a less-than-significant impact and not warrant further analysis:

- Historical Resources
- Human Remains

Archaeological Resources

Pursuant to Section 15064.5 of the State CEQA Guidelines, a project would have a significant effect on the environment if it would “cause a substantial adverse change in the significance of an archaeological resource.” Additionally, pursuant to Section 15064.5, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Furthermore, under Public Resources Code Section 21083.2g, a unique archaeological resource is defined as 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:

- The resource contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;
- The resource has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- The resource is directly associated with a scientifically recognized important prehistoric or historic event or person.
- A non-unique archaeological resource means an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources receive no further consideration under CEQA.

Paleontological Resources

Pursuant to Appendix G of the State CEQA Guidelines, a project would have a significant effect on the environment if it would “directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.”

A paleontological resource may be significant if the resource:

- Provides important information on the evolutionary trends among organisms, relating living organisms to extinct organisms;
- Provides important information regarding development of biological communities or interaction between botanical and zoological biota;

- Demonstrates unusual circumstances in biotic history; or
- Is in short supply and in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and is not found in other geographic localities.

Project Impacts and Mitigation Measures

Impact CULT-1: Archaeological Resources

The cultural resources study conducted at the site did not identify any archaeological resources through archival research or field survey. Despite these negative findings, the study area has moderate potential to contain unrecorded Native American cultural resources, due to the presence of valuable resources and suitability for human habitation. Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements; and locally darkened soil (middens). The potential discovery and disturbance of archeological resources during excavation is considered a **potentially significant** impact.

Implementation of Mitigation Measure CULT-1 below would ensure that potentially significant impacts to cultural resources are reduced to a **less-than-significant** level.

Mitigation Measure CULT-1:

The following measure shall be implemented throughout the grading phase of the project:

A Native American monitor and an archaeological monitor shall be present at the project site during ground disturbing activities related to construction. If any archaeological or paleontological deposits are encountered, all soil-disturbing work should be halted at the location of any discovery until a qualified archaeologist or paleontologist evaluates the significance of the find(s) and prepares a recommendation for further action.

Impact CULT-2: Paleontological Resources:

There are no known paleontological resources or unique geological features on the proposed project site. Soils mapped for the area were composed of Candlestick variant loams that are well-drained and typically found on alluvial fans. During the field survey, soils were observed to be silty and loamy with high concentrations of rounded gravels (~40%). Although these soils do not contain known unique geological features, there is a possibility unknown paleontological resources could be uncovered during site excavations. This is considered a **potentially significant** impact.

Implementation of Mitigation Measure CULT-1 would reduce this potentially significant impact to a **less-than-significant** level.

Mitigation Measure CULT-2:

See Mitigation Measure CULT-1.

CUMULATIVE IMPACTS

Implementation of the proposed project in combination with the related projects (see Table III-1, Related Projects List) would result in the development of various land uses in the City of Pacifica. Impacts to cultural resources tend to be site-specific and are assessed on a site-by-site basis. The extent of the cultural resources (if any) that occur at the sites of the related projects is unknown, and thus, it is not known whether any of the related projects would result in significant impacts to cultural resources. However, similar to the proposed project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of the related project would be required to implement the appropriate mitigation measures. Thus, given the project's cultural resources impacts can be completely mitigated, the proposed project's impacts to cultural resources would not be cumulatively considerable. Therefore, cumulative impacts to cultural resources would be ***less than significant***.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts to cultural resources would be mitigated to a level of ***less than significant***.