

4.7 CULTURAL AND PALEONTOLOGICAL RESOURCES

4.7.1 INTRODUCTION

Appendix G of the California Environmental Quality Act (CEQA) Guidelines requires that cultural resources issues be evaluated as part of the environmental documentation process. The findings are summarized in this section and are included in their entirety in Appendix F.

4.7.2 REGULATORY SETTING

This section contains a discussion of the applicable laws, ordinances, regulations, and standards that govern cultural resources and that must be adhered to prior to and during the grading and construction of the proposed Project.

Federal and State

Eligibility is determined in a formal process of review in which a resource is proposed for listing and the U.S. Department of the Interior (for the National Register of Historic Places [NRHP]) or the California Office of Historic Preservation (for the California Register of Historic Resources [CRHR]) determines eligibility. A resource deemed eligible for the NRHP is typically deemed eligible for the CRHR. The NRHP is an inventory of historic resources and is maintained by the U.S. Secretary of the Interior. The CRHR is an authoritative guide to California's significant historical and archaeological resources to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the state, and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR is maintained by the California Office of Historic Preservation's (OHP's) State Historic Preservation Officer (SHPO).

The cultural resources analysis—including that pertaining to built environment, archaeological and paleontological resources—has been prepared to meet the requirements of CEQA (*California Public Resources Code* [PRC] §§21083.2 and 21084.1). Under the CEQA Guidelines, “[a] project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment” (14 *California Code of Regulations* [CCR], Section 15064.5[b]). Substantial adverse change is defined as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (14 CCR 15064.5[b][1]). CEQA has established statutory requirements for the formal review and analysis of projects that fall under its jurisdiction. The CEQA statutes maintain that any property listed in, determined, or found eligible for listing in the CRHR is considered to be a “historical resource” and shall be considered historically significant. In addition, the *California Public Resources Code* has additional statutes regarding “unique” resources. The criteria below are used to determine eligibility and significant effects.

Prehistoric Archaeological and Historic Resources

CEQA requires a lead agency to determine whether a project may have a significant effect on one or more historical resources. A “historical resource” is defined as a resource listed in or determined to be eligible for listing in the CRHR (PRC §21084.1); a resource included in a local register of historical resources (14 CCR 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR §15064.5[a][3]).

Section 5024.1 of the *Public Resources Code*, Section 15064.5 of the CEQA Guidelines, and Sections 21083.2 and 21084.1 of the CEQA Statutes were used as the basic guidelines for the EIR analysis. PRC 5024.1 requires evaluation of historical resources to determine their eligibility for listing in the CRHR. The purposes of the register are to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP.

Section 15064.5(a)(3) of the CEQA Guidelines states that “[g]enerally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (PRC §5024.1; 14 CCR 4852), including if the resource:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with lives of persons important in our past;
- C. 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
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

Using the information outlined above, the first level of evaluation was to determine whether a resource within a site is considered eligible for the CRHR and is, therefore, significant.

Impacts to significant cultural resources that affect those characteristics of the resource that qualify it for the NRHP or adversely alter the significance of a resource listed on or eligible for listing on the CRHR are considered a significant effect on the environment. Impacts to cultural resources are considered significant if a project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; and/or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

An archaeological resource must be determined to be “unique” or “historic” for an impact to the resource to be considered significant. “Unique” resources are defined in Section 21083.2(g) of the *California Public Resources Code*; as used in this section, ‘unique archaeological resource’ means 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 any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Section 21083.2(b) states “If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state...” CEQA Section 21083(c) states that “To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required....”

Historic Resources

“Historical” resources are defined in PRC 21084.1, and the State CEQA Guidelines (14 CCR15064.5). Section 21084.1 states:

A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section.

14 CCR 15064.5(b) (i.e., the CEQA Guidelines) states:

A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

- (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- (2) The significance of an historical resource is materially impaired when a project:
 - (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
 - (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources...unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

A “Unique” resource is defined in PRC 21083.2(g) and is noted above under prehistoric archaeological resources.

Paleontological Resources

Paleontological resources are nonrenewable scientific and educational resources. The legislative framework for impacts on paleontological resources is contained in Appendix G (Environmental Checklist Form) of the CEQA Guidelines and includes paleontological resources under the general heading “Cultural Resources”. Projects subject to CEQA must determine whether the project would “directly or indirectly destroy a unique paleontological resource”.

An impact to paleontological resources would be considered a significant impact if a project results in the direct or indirect destruction of a unique or important paleontological resource or site. A resource is deemed unique or important if: (1) it has fossils that have previously been recovered from a particular geologic unit; (2) there are recorded fossil localities within the same geologic units as occur within the project area; and (3) the types of fossil materials that have been recovered from the geologic unit are unique or important.

City of Newport Beach

The City of Newport Beach has adopted archaeological and paleontological guidelines that govern the identification and evaluation of these resources and are used to guide the development or redevelopment of lands within the City. The City Council Policy Manual Guidelines are summarized in Appendix F to this EIR.

With respect to paleontological resources, City Policy K-4 (adopted on August 26, 1974, amended on January 24, 1994, and corrected on March 22, 1999) requires that impacts to paleontological resources caused by development be mitigated in accordance with CEQA. Procedures to be used to assess paleontological resources are: a walk-over site survey; review of publications and reports on the geology or paleontology of the area; analysis of all available soils information; and examination of the relationship of the proposed development site to known or potential fossil producing areas identified in available records, as applicable.

With respect to archaeological resources, City Policy K-5 (adopted on January 13, 1975, amended on January 24, 1994, and corrected on March 22, 1999) requires that an impact to significant archaeological resources caused by any development be mitigated in accordance with CEQA. If deemed necessary by the City, the City will require a site survey and report that identifies potential impacts, alternatives, and recommendations for impact mitigation.

General Plan Historic Resources Element

The Historic Resources Element of the *City of Newport Beach General Plan* includes goals and policies related to cultural resources that are applicable to the proposed Project. These goals and policies are provided in Table 4.1-2 in Section 4.1, Land Use and Related Planning Programs, with a Project consistency analysis.

Local Coastal Program Coastal Land Use Plan (CLUP)

Chapter 4. Coastal Resource Protection

Section 4.5 of the CLUP incorporates archaeological and paleontological policies of the California Coastal Act applicable to Newport Beach. These policies address the protection of and mitigation for impacts to these resources. Policies 4.5.1-1 through 4.5.1-5 are applicable to the Project and are identified in Table 4.1-3 in Section 4.1, Land Use and Related Planning Programs, with a Project consistency analysis.

4.7.3 EXISTING CONDITIONS

Natural Setting

The Project site is located west of the current Newport Bay at the northwestern edge of the San Joaquin Hills, approximately one mile southeast of the mouth of the Santa Ana River. The Project area is located on the northern end of the Peninsular Range Geomorphic Province. These rocks are composed of pre-Cretaceous (more than 65 million-year-old) igneous and metamorphic rock with limited exposures of post-Cretaceous sedimentary deposits. However, these sedimentary deposits in coastal Orange County are considered to be some of the most important fossil-producing formations in the world (BonTerra Consulting 2009b).

Prehistoric Setting

According to a general chronology developed by Wallace (1955), the local cultural sequence throughout Orange County was characterized as follows:

Horizon I: Early Man or Paleo-Indian Period (11,000 BCE to 7,500 BCE). While initially termed Early Man Horizon (I) by Wallace (1955), this early stage of human occupation is commonly referred to as the Paleo-Indian Period today (BonTerra Consulting 2009b). The precise start of this period is still a topic of considerable debate. At inland archaeological sites, the surviving material culture of this period is primarily lithic, consisting of large, extremely well made stone projectile points and tools such as scrapers and choppers. Encampments were probably temporary, located near major kills or important resource areas. The San Dieguito Tradition, defined by Warren at the stratified C.W. Harris site in San Diego County, is encompassed by this period of time (BonTerra Consulting 2009b). (See BonTerra Consulting 2009b for more information).

Horizon II: Milling Stone Assemblages (7,500 BCE to 1,000 BCE). The Milling Stone Period was named for the abundant millingstone tools associated with sites of this period. These tools, the mano and metate, were used to process small, hard seeds from plants associated with shrub-scrub vegetation communities. An annual round of seasonal migrations was likely practiced, with movements coinciding with ripening vegetal resources and the periods of maximal availability of various animal resources. Along the coast, shell midden sites are common site types. Some formal burials, occasionally with associated grave goods, are also evident. Warren (1968) suggests that, as millingstones are common and projectile points are comparatively rare during this period of time, hunting was less important than the gathering of vegetable resources. More recent studies (BonTerra Consulting 2009b) suggest that a diversity of subsistence activities, including hunting of various game animals, were practiced during this period. (See BonTerra Consulting 2009b for more information).

Horizon III: Intermediate Cultures (1,000 BCE to 750 CE). The Intermediate Period is identified by a mixed strategy of plant exploitation, terrestrial hunting, and maritime subsistence

strategies. Chipped stone tools such as projectile points generally decrease in size, but increase in number. Abundant bone and shell remains have been recovered from sites dating to these time periods. In coastal areas, the introduction of the circular shell fishhook and the growing abundance of fish remains in sites over the course of the period suggest a substantial increase in fishing activity during the Intermediate Horizon. It is also during this time period that mortar and pestle use intensified dramatically. The mano and metate continued to be in use on a reduced scale, but the greatly intensified use of the mortar and pestle signaled a shift away from a subsistence strategy based on seed resources to that of the acorn. It is probably during this time period that the acorn became the food staple of the majority of the indigenous tribes in Southern California. This subsistence strategy continued until European contact. Material culture became more diverse and elaborate and included steatite containers, perforated stones, bone tools, ornamental items, and asphalt adhesive.

Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE). During the Late Prehistoric Period, exploitation of many food resources, particularly marine resources among coastal groups, continued to intensify. The material culture in the Late Prehistoric Horizon increased in complexity in terms of the abundance and diversity of artifacts being produced. The recovery and identification of a number of small projectile points during this period likely suggests a greater use of the bow and arrow, which was likely introduced near the end of the Intermediate Period. Shell beads, ornaments, and other elements of material culture continue to be ornate, varied, and widely distributed; the latter evidence suggests elaborate trade networks. Warren's (1968) scheme divides the late prehistoric period into several regional traditions. Western Riverside County, Orange County, and the Los Angeles Basin area are considered part of the "Shoshonean" tradition, which may be related to a possible incursion of Tadic speakers into these areas during this period. The Late Prehistoric Period includes the first few centuries of early European contact (1542–1769 CE); it is also known as the Protohistoric Period as there was a low level of interaction between native Californians and Europeans prior to Portolá's overland expedition in 1769.

In the few centuries prior to European contact, the archaeological record reveals substantial increases in the indigenous population (BonTerra Consulting 2009b). Some village sites may have contained as many as 1,500 individuals. Apparently, many of these village sites were occupied throughout the year rather than seasonally. This shift in settlement strategy was likely influenced by improved food procurement and storage technology, which enabled population growth and may have helped stimulate changes in sociopolitical organization. (See BonTerra Consulting 2009b for more information).

Ethnographic Setting

The Project site is located in an area that was occupied during the Late Prehistoric Period by the Native American societies commonly known as the Juaneño and the Gabrielino (BonTerra Consulting 2009b). "Juaneño" denotes those people who in historic times were administered by the Spanish from Mission San Juan Capistrano. Many contemporary Juaneño identify themselves as descendents of the indigenous people living in the local San Juan and San Mateo Creek drainage areas, termed the Acjachemen Nation. "Gabrielino" identifies those Native Americans who were under the control of the Spanish Mission San Gabriel; the overwhelming number of people here were of the same ethnic nationality and language group, and they generally refer to themselves as *Tongva*. Their territory extended from northern Orange County to the San Fernando Valley in Los Angeles County. The terms the Native Americans in Southern California used to identify themselves have, for the most part, been lost; therefore, the names do not necessarily identify specific ethnic or tribal groups. The two groups are broadly similar, but there are sufficient differences in Gabrielino and Juaneño language,

ritual observances, and material culture to justify their identification as separate social groups (BonTerra Consulting 2009b).

Prehistoric Archaeological and Historic Resources

Table 4.7-1 identifies and briefly describes the on-site cultural resources.

**TABLE 4.7-1
ON-SITE CULTURAL RESOURCES**

Trinomial	Recorder/Year	Comment
CA-ORA-1600	Smith et al./1998	Lithic scatter
CA-ORA-1601H	Smith et al./1998	Historic trash scatter
CA-ORA-1602H	Smith et al./1998	Historic trash scatter
CA-ORA-1610H	Smith et al./1998	Historic trash scatter/World War II gun emplacement site

One prehistoric and three historic resources are recorded on the Project site and five cultural resources studies have included the site. There have been 38 cultural resources investigations within a one-mile radius of the site, and 18 cultural resources have been recorded.

Mr. Patrick Maxon, RPA visited the Project site on February 27, 2009, to evaluate existing conditions. BonTerra Consulting completed an archaeological test excavation in June 2009. CA-ORA-1600, CA-ORA-1601H, and CA-ORA-1602H were subjected to test excavations; CA-ORA-1610H was further studied through historic research and on the ground survey. A brief description of each site is provided, as well as a determination of eligibility for the NRHP. As previously addressed, most resources deemed eligible for the NRHP would be considered eligible for the CRHR. Final determinations are made by the SHPO.

CA-ORA-1600: This site was recorded in 1990 by Smith et al. as part of the fieldwork associated with Phase I survey activities associated with Banning Ranch (BonTerra Consulting 2009b). The site consisted of a diffuse lithic scatter containing two pieces of quartz shatter, one quartz flake, two quartz thinning flakes, three chert flakes, and one retouched utilized chert core/scrapper within an area of 25 meters by 10 meters. An investigation in 2008 noted one small milky quartz flake and one large (4- to 5-centimeters [cm] thick) secondary core reduction flake made of a brownish quartzite. Some shell was also observed in small quantities (BonTerra Consulting 2009b). All seven of the STPs excavated in the mapped location of this site returned negative cultural material. The lack of cultural material, evidence of surface historic material, and obvious appearance of topographic disturbance leaves little to no value in these specimens. The site does not possess the integrity or distinction to warrant listing in the NRHP or CRHR.

CA-ORA-1601H was previously recorded as “partially buried trash scatter eroding out of the roadway entering the pad from the south.” Strudwick and Goodwin (2008) report the site in much the same condition as originally recorded by Drover and Smith (1999). The site was relocated during the current field check, and a few fragments of historic material, chiefly bottle glass, were noted.

The field check by BonTerra Consulting revealed that the site was in much the same condition as reported by Strudwick and Goodwin (2008:61). BonTerra Consulting Archaeologists note that the site lies on the edge of a highly eroded, graded upland flat which, upon surface inspection, has four artifacts associated with the early 20th Century. In addition to surface inspection, shovel test pits were excavated at the site at a three-meter interval, resulting in no positive tests or

evidence of subsurface deposits within an area measuring approximately ten meters in diameter. No intact cultural lenses or structural remains were present. Material recovered included one milk glass cold cream jar, two amethyst glass bottle finishes, and one aqua glass bottle base. The site does not possess the integrity or distinction to warrant listing in the NRHP or CRHR. (See BonTerra Consulting 2009b for more information).

CA-ORA-1602H was previously recorded as a “partially buried historic trash dump eroding out of the southwest facing wall of a moderately wide steep-walled drainage”. This deposit was relocated and appeared in the same manner to BonTerra Consulting Archaeologists (BonTerra Consulting 2009b).

As recorded by BonTerra Consulting, the site lies on the slope of a highly eroded, graded upland flat which, upon surface inspection, yielded 49 artifacts associated with the late 19th/20th Centuries. In addition to surface inspection, one shovel test pit was dug, resulting in one positive test. Subsurface artifacts were encountered at 0 to 80 cm below the surface. Two dark amber (“black glass”) bottle bases with pontil scars represent the middle to late 19th Century, while the remainder of the assemblage is dominated by ceramic and glass bottle fragments from the early 20th Century. Building material, including nails, brick fragments and window glass, were recovered. Charcoal, ash, and fire-affected artifacts were present at 60 to 80 cm, representing a discrete cultural lens within the site. No other area proved to be culturally intact.

Materials recovered include 11 amethyst glass shards; 14 aqua glass shards; 21 amber glass shards; 66 clear glass shards; 2 milk glass shards; 1 cobalt glass shard; 2 green glass shards; 8 olive glass shards; 35 white ware/ironstone sherds; 10 porcelain sherds; 6 salt glazed stoneware sherds; 1 earthenware sherd; 10 mammal bones; 31 miscellaneous building materials; 55 miscellaneous metals; and 1 glass faux pearl hatpin mount. The site does not possess the integrity or distinction to warrant listing in the NRHP or CRHR.

CA-ORA-1610H was previously recorded as the location of a World War II gun emplacement. This site’s recorded location is on the mesa top directly above sites CA-ORA-1601H and CA-ORA-1602H, which are included in the site record (BonTerra Consulting 2009b) as separate loci of the overall site.

In 1941, the U.S. Army Air Corps considered opening a flying base on 1,400 acres of Newport Banning Ranch. The land was offered for purchase at \$250 per acre. Major C.C. Mosely, the head of Cal-Aero Corporation (a private firm that trained many pilots for later military service) also looked at 750 acres of the Newport Banning Ranch property in order to establish a flying school. Both Mosely and the U.S. Government rejected the site as an airfield. The U.S. Army Air Corps did consider the site a good place to locate a gun emplacement as part of line of defense against a potential attack from Japan on the west coast of the United States. In 1941 and 1942, temporary field mounts were used for the installation of three 155-millimeter (mm) guns near West Coast Highway. In 1943, three permanent Panama gun mounts were constructed on the Newport Banning Ranch property. A “Panama” gun mount consists of a large circular concrete platform, approximately 38 feet in diameter, where the end of the gun was fixed in the center of concrete pad and the front of the gun could be pushed along a circular metal rail, rotating the mouth of the gun into firing position. The 3 mounts were placed about 200 feet apart with a system of 6-foot-deep trenches and ammunition storage areas running between them. After the end of World War II, the guns were removed and the trenches backfilled with the demolished concrete pads and other related and un-related refuse.

Field reconnaissance of the site by BonTerra Consulting strongly suggests that this was the location of the World War II gun emplacement. Found in a small arroyo adjacent to the site are the remnants of an omega-shaped concrete anchor used to hold the gun in place and still embedded in a larger concrete slab. However, a comparison of current and historic maps and photographs shows that up to 20 feet of the top of the mesa that supported the gun, as well as the entire northern and southern portions of the mesa itself, have been removed. This likely occurred during oil extraction operations on the Newport Banning Ranch property. Therefore, there is little chance that any of the gun emplacement and associated trenches and ammunition storage spaces remain. The site does not possess the integrity or distinction to warrant listing in the NRHP or CRHR.

Given these results, none of these sites appear to possess the integrity or distinction to warrant listing in the NRHP or the CRHR.

Paleontological Resources

Research performed at the Natural History Museum of Los Angeles County noted no fossil localities on the Project site. However, nearby localities of sedimentary deposits also occur on the site. Surface deposits on the Project site consist of marine Quaternary terrace deposits with a mixture of terrestrial components. Underlying this, and exposed in the cliffs below the terraces, are the marine Late Miocene Capistrano and Monterey Formations.

A paleontological assessment conducted by LSA Associates, Inc. identifies the Project site as containing Quaternary Old Marine (middle to late Pleistocene), Young Channel (late Pleistocene to early Holocene), and Eolian (late Holocene) deposits. Marine invertebrates were noted. The assessment concludes that these formations have a high potential for encountering fossils ("High A") and recommended that a Paleontological Resources Impact Mitigation Program (PRIMP) be developed to guide monitoring of grading in areas identified as likely to contain fossils (BonTerra Consulting 2009b).

A current assessment of paleontological resources on the site was conducted by BonTerra Consulting Paleontologist Mark Roeder. It included a review of existing literature, a field survey, and a technical report (BonTerra Consulting 2009b). On August 2, 2009, Mr. Roeder conducted a field assessment of the Project site. The study established that four lithologic units that underlie the proposed development have been mapped. These units range in age from late Miocene to Holocene and consist of Tertiary Monterey Formation (Tm), Quaternary marine terrace deposits (Qtm), Quaternary younger alluvium (Qa), and Quaternary aeolian deposits. The records search at the Natural History Museum of Los Angeles County did not reveal the presence of any previously recorded fossil sites in Monterey Formation or Quaternary marine terrace deposits. However, during the course of the paleontological survey, three distinct fossil shell-bearing horizons (BON 1, 2, and 3) were found in the large road cut along Superior Avenue and two other fossil shell-bearing horizons (BAN 5 and 6) were found in the proposed park access road right-of-way. These localities are depicted on Exhibit 4.7-1.

Although no fossils from the Monterey Formation have been reported from this area and no fossils were observed during the field survey, the Monterey Formation has yielded significant fossils in other areas of Orange County. The Quaternary younger alluvium and aeolian deposits may be too young to yield fossils. Therefore, the Monterey Formation and Quaternary marine terrace deposits are considered to have high paleontological sensitivity, while the Quaternary younger alluvium and aeolian deposits are of low paleontological sensitivity.

4.7.4 PROJECT DESIGN FEATURES AND STANDARD CONDITIONS

Project Design Features

No Project Design Features have been identified.

Standard Conditions and Requirements

SC 4.7-1 In accordance with *California Health and Safety Code*, Section 7050.5, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 48 hours. In accordance with *California Public Resources Code*, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

4.7.5 METHODOLOGY

Archaeological and Historical Resources

Archival studies conducted in support of this assessment include a cultural resources records search conducted by Mr. Patrick Maxon, RPA, of BonTerra Consulting at the South Central Coastal Information Center (SCCIC) at the California State University, Fullerton on February 2, 2009. The review consisted of an examination of the U.S. Geological Survey 7.5-minute Quadrangle, Newport Beach, California and its Mylar overlays, to evaluate the Project area for any sites recorded or cultural resources studies conducted within the parcel and within a one-mile radius. Data sources consulted at the SCCIC included historic maps, reports from previous studies, and the Historic Resource Inventory maintained by the California Office of Historic Preservation for Orange County. The Historic Resource Inventory contains listings from the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

Four cultural resources (CA-ORA-1600, CA-ORA-1601H, CA-ORA-1602H, and CA-ORA-1610H) are recorded on the Project site and five cultural resources studies have included the Project area. Eighteen cultural resources are recorded within approximately one-mile of the Project area, and there have been 38 cultural resources investigations within a one-mile radius of the site.

Mr. Maxon visited the Project site on February 27, 2009, to evaluate existing conditions. BonTerra Consulting conducted an archaeological test excavation of the four sites; surveys were completed in June 2009. CA-ORA-1600, CA-ORA-1601H and CA-ORA-1602H were subject to test excavations; CA-ORA-1610H was further studied through historic research and an on the ground survey.

Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects to cultural resources from development. These resources



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Locations of Fossil Sites

Sunset Ridge Park EIR

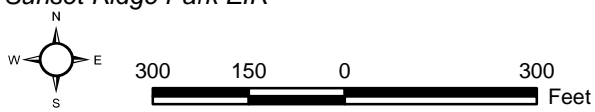


Figure 4.7-1



may be sacred lands, traditional cultural places and resources, and archaeological sites. The Native American Heritage Commission (NAHC) provided a list of tribal affiliations in the area. Tribal representatives were notified by mail of the proposed Project and their comments or questions were invited regarding the proposed Project.

The Juaneño Band of Mission Indians Acjachemen Nation requested that an archaeological monitor be present on site during ground disturbing activities and that a Native American monitor should also be included in the event of a cultural resources discovery (Perry 2009). The Juaneño Band of Mission Indians noted that the site is sensitive for the presence of burials; archaeological and Native American monitoring of ground disturbance during any grading activities was recommended (BonTerra Consulting 2009b).

The Gabrielino/Tongva San Gabriel Band of Mission Indians noted that Gabrielino oral history suggests that they made use of the ocean and bluffs of the area and that burial could be present. Archaeological and Native American monitoring of grading was recommended (BonTerra Consulting 2009b). (See BonTerra Consulting 2009b for more information).

Paleontological Resources

The Natural History Museum of Los Angeles County performed a paleontological literature review in February 2009. The review included the results of a records search and literature review of known rock formations and any fossil localities that have been identified within and directly adjacent to the Project site.

4.7.6 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The Project would result in a significant impact related to cultural resources if it would:

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|------------------------|--|
| Threshold 4.7-1 | Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. |
| Threshold 4.7-2 | Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. |
| Threshold 4.7-3 | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. |
| Threshold 4.7-4 | Disturb any human remains, including those interred outside of formal cemeteries. |

4.7.7 ENVIRONMENTAL IMPACTS

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|------------------------|--|
| Threshold 4.7-1 | <i>Would the project would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</i> |
| Threshold 4.7-2 | <i>Would the project would cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?</i> |

The comparison of the Project site to older photographs and topographic maps of the area demonstrates that the site has been subject to sediment and soil removal. These excavations likely obliterated or at least severely disturbed any archaeological sites that may have at one time existed there. The purpose of the records search conducted at the SCCIC was to

determine if any reports have been submitted that document the presence or absence of historic resources on the Project site. The records search provides information about known resources and previous studies for the site. Additionally, archaeological testing was conducted on the three known sites. No known significant historical resources are present. The gun emplacement site (CA-ORA-1610H) has been removed from its former location by grading of the mesa top on which it stood. CA-ORA-1600, CA-ORA-1601H and CA-ORA-1602H were tested and determined to not be significant or eligible for listing on the NRHP or CRHR as summarized on Table 4.7-2. However, historical and archaeological sites are known to exist in the City. Therefore, there is a potential for disturbance of undiscovered resources during grading activities. Implementation of MM 4.7-1 (archaeological monitoring) would reduce this impact to a level considered less than significant.

**TABLE 4.7-2
ON-SITE CULTURAL RESOURCES SIGNIFICANCE**

Site CA-	Description	Condition	Prior Testing	Current Testing	CEQA/Section 106 Eligibility Recommendation
ORA-1600	Lithic scatter	Poor	No	7 STPs	Not eligible
ORA-1601H	Historic Trash scatter	Poor	No	2 STPs	Not eligible
ORA-1602H	Historic Trash scatter	Poor	No	1 STP	Not eligible
ORA-1610H	Historic trash scatter/World War II gun emplacement site	Destroyed	No	None	Not eligible
STP: Shovel Test Pits					

Impact Summary: *Less Than Significant With Mitigation.* The Project would not impact any known historic or archaeological resources. Grading could impact unknown resources. This impact would be mitigated to a level considered less than significant with implementation of MM 4.7-1.

Threshold 4.7-3 *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Surface deposits on the Project site consist of marine Quaternary terrace deposits with a mixture of terrestrial components. Underlying this and exposed on the site are the marine Late Miocene Capistrano and Monterey Formations. These are all sensitive rock formations with the potential to yield significant fossils during construction. Grading activities could impact significant paleontological resources. This potential loss of resources is considered a potentially significant impact. Implementation of MM 4.7-2 would reduce this impact to a level considered less than significant.

Impact Summary: *Less Than Significant With Mitigation.* Grading activities could impact significant paleontological resources. This impact would be reduced to a level considered less than significant with implementation of MM 4.7-2.

Threshold 4.7-4 *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

There is no indication that there are burials present on the Project site. Native American tribes note that ancestors were often buried in coastal locations and much evidence exists to support this supposition. In the event that human remains are discovered during grading activities, SC 4.7-1, which addresses procedures to follow in the event of a discovery of suspected human

remains, would reduce proposed Project impacts to human remains to a less than significant level.

Impact Summary: *Less Than Significant With Mitigation.* Grading activities could impact unknown human remains, including those interred outside formal cemeteries. This impact would be less than significant with implementation of SC 4.7-1.

4.7.8 CUMULATIVE IMPACTS

No buildings, structures, or objects meeting the definition of a “historical resource” (as defined by CEQA) have been identified on the Project site. Therefore, there is no potential for cumulative impacts to any aboveground historic resources. As defined in CEQA Guidelines §15130, a cumulative impact consists of an impact that is created as a result of the incremental effects of the project evaluated in the EIR together with the effects of other projects causing related impacts.

Although the Project, in conjunction with the effects of past projects, other current projects and probable future projects in the City and the local area have the potential to yield cultural resources, these project impacts would need to be individually evaluated and mitigated. Mitigation can reduce potential impacts to a less than significant level. As with the proposed Sunset Ridge Park Project, testing and data recovery is routinely required of projects prior to and during grading activities. Despite the site-specific nature of the resources, the mitigation identified for use in the event that unknown or undocumented resources were discovered would reduce the potential for cumulative impacts. As a result, the Project would not contribute to a significant cumulative impact on archaeological or paleontological resources or result in a significant cumulative loss in regional history or prehistory.

Impact Summary: *Less Than Significant With Mitigation.* Implementation of the Mitigation Program set forth in the EIR would mitigate the Project’s contribution to cumulative cultural and paleontological resources to a less than significant level.

4.7.9 MITIGATION PROGRAM

Project Design Features

No Project Design Features have been identified.

Standard Conditions and Requirements

SC 4.7-1 In accordance with *California Health and Safety Code*, Section 7050.5, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with *California Public Resources Code*, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the

site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Mitigation Measures

MM 4.7-1 The Project Manager shall provide written evidence to the City of Newport Beach Public Works Department and/or Planning Department that a qualified Archaeologist has been retained to observe grading activities and to salvage and catalogue archaeological resources, as necessary. The Archaeologist shall be present at the pre-grade conference; shall establish procedures for archaeological resource surveillance; and shall establish, in cooperation with the Project Manager, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts, as appropriate. If archaeological resources are found to be significant, the Archaeologist shall determine appropriate actions, in cooperation with the City and Project Manager, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Public Works Director and/or Planning Director.

Based on their interest and concern about the discovery of cultural resources and human remains during Project grading, consideration should also be given to retaining a Native American Monitor to observe some or all grading activities.

Nothing in this mitigation measure precludes the retention of a single cross-trained observer who is qualified to monitor for both archaeological and paleontological resources.

MM 4.7-2 The Project Manager shall provide written evidence to the City of Newport Beach Public Works Department and/or Planning Department that a qualified Paleontologist has been retained to observe grading activities and conduct salvage excavation of paleontological resources as necessary. The Paleontologist shall be present at the pre-grading conference; shall establish procedures for paleontological resources surveillance; and shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate.

Any earth-moving activity associated with development, slope modification, or slope stabilization that requires moving large volumes of earth shall be monitored according to the paleontological sensitivity of the rock units that underlie the affected area. All vertebrate fossils and representative samples of megainvertebrates and plant fossils shall be collected. Productive sites that yield vertebrates should be excavated, and approximately 2,000 pounds (lbs) of rock samples should be collected to be processed for microvertebrate fossil remains. The Society of Vertebrate Paleontology (SVP) recommends that a standard sample of 6,000 lbs be collected for microvertebrate sites (BonTerra Consulting 2009b). It is recommended that such a large volume only be required in very unique situations, such as in an area where no fossils have ever been reported and the results would greatly alter scientific interpretations of the area, or if the site is so rich that the diversity of known taxa (species) would be greatly enhanced by processing a larger volume.

If any scientifically important large fossil remains are uncovered during earth-moving activities, the Paleontologist shall divert heavy equipment away from the fossil site until s/he has had an opportunity to examine the remains. If warranted, a rock sample will be collected for processing. The Paleontologist shall be equipped to rapidly remove fossil remains and/or matrix (earth), and thus reduce the potential for any construction delays.

If scientifically important fossil remains are observed and if safety restrictions permit, the Project Manager shall allow the Paleontologist to safely salvage the discovery. At the Paleontologist's discretion, the Project Manager may assist in the removal of the fossil remains and rock sample to reduce any construction delays.

All fossils shall be documented in a detailed Paleontological Resource Impact Mitigation Report. Fossils recovered from the field or by processing shall be prepared; identified; and, along with accompanying field notes, maps and photographs, accessioned into the collections of a designated, accredited museum such as the Natural History Museum of Los Angeles or the San Diego Natural History Museum.

Because of slope modification, fossil-bearing exposures of the Quaternary marine deposits may be destroyed. If feasible, a few stratigraphic sections with fossil-bearing horizons should be preserved for educational and scientific purposes.

The following are recommendations specific to each lithologic unit.

- a. **Monterey Formation:** A qualified Paleontologist shall be notified when earth-moving activities are anticipated to impact undisturbed deposits. The designated Paleontologist should visit the area of construction on a full-time basis to assess whether scientifically important fossils are exposed during construction activities. If fossil material is observed during construction, specimens shall be removed following standard paleontological protocols.
- b. **Quaternary Marine Terrace Deposits:** Prior to the start of grading, a qualified Paleontologist shall collect exposed fossils from the three distinct fossil shell horizons (BON 1, 2, 3) exposed along the cut on Superior Avenue and the two other fossil shell-bearing horizons (BAN 5 and 6) in the proposed access road right-of-way. A bulk sample of at least 100 lbs per fossil site should be processed through fine screens to recover rare types of fossil marine mollusks, bony fish, sharks, reptiles, birds, and marine and terrestrial mammals. A detailed measured section, placing the fossil sites in a stratigraphic sequence, shall be made.

A qualified Paleontologist shall be notified when earth-moving activities are anticipated to impact undisturbed deposits. The designated Paleontologist should be present on a full-time basis during construction activities to assess whether scientifically important fossils are exposed. If fossil material is observed during construction, specimens should be removed following standard paleontological protocols.

- c. **Younger Alluvium and Aeolian Deposits:** A qualified Paleontologist shall be notified when earth-moving activities are anticipated to impact undisturbed deposits. The designated Paleontologist should visit the construction area on a part-time basis to assess whether scientifically important fossils are exposed during construction activities. If fossil material is observed during construction, specimens should be removed following standard paleontological protocols.

Nothing in this mitigation measure precludes the retention of a single cross-trained observer who is qualified to monitor for both archaeological and paleontological resources.

4.7.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the Mitigation Program, potential impacts to cultural and paleontological resources would be reduced to a level considered less than significant.