

## 4.6 CULTURAL RESOURCES

### 4.6.1 Introduction and Methodology

This section focuses on the project's potential to impact existing cultural and paleontological resources within the project area. This analysis is based on the June 2010 Cultural Resources Inventory Update conducted by ASM Affiliates Inc. (ASM) and the July 2010 Paleontological Resources Assessment prepared by the Department of PaleoServices at the San Diego Natural History Museum (see Appendices H and I to this environmental impact report (EIR), respectively).

The Cultural Resources Inventory Update was based on a record search, literature review, field survey, and Native American consultation, some of which was included in the previous Cultural Resources Inventory prepared by ASM for this site in November 2004. The Paleontological Resources Assessment was based on a record search, literature review, and field investigation.

The following discussion focuses on the project's relationship to existing cultural and paleontological resources, potential impacts to these resources, and mitigation measures required to reduce these impacts to below a level of significance. In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15120(d), information about the precise location of archaeological sites is not included in this EIR due to the sensitivity of archaeological resources. Note that this project is not subject to Assembly Bill 52, because the project's Notice of Preparation was released prior to July 1, 2015 and therefore does not discuss potential impacts to Tribal Cultural Resources as defined by PRC Section 21074(a).

### 4.6.2 Existing Conditions

#### Background – Cultural Setting

Archaeological investigations have revealed a variety of human occupation along the southern California coast, ranging from the early Holocene Period to the Ethnohistoric Period (Becker and Iversen 2009). More specifically, the prehistory of San Diego County can be broken down into three spans: the Paleo-Indian, the Archaic, and the Late Prehistoric. The Paleo-Indian Period occurred from 11,500 Before Present (BP) to 8,500/7,500 BP; the Archaic Period from 8,500 BP to 1,300/800 BP; and the Late Prehistoric Period from 1,300/800 BP to 200 BP. Although there may have been human occupation on the Southern California coast before the Paleo-Indian Period, no sites have been dated to earlier than 10,000 BP (Becker and Iversen 2009).

The Late Prehistoric Period is, in general, linked with the ethnographic and historic record of local Native Americans. It is also generally characterized by the appearance of ceramics; the replacement of burials with cremations; the appearance of small, pressure-flaked projectile points indicative of bow-and-arrow technology; and an emphasis on inland plant food collection and

processing (Becker and Iversen 2009). The Luiseño/Juaneño, of the Shoshonean language group, inhabited the northern parts of San Diego County during this time.

The Franciscan friars called the Shoshonean inhabitants of northern San Diego County Luiseños. These friars also named the San Luis Rey River and established the Mission San Luis Rey in 1798. The Mission was situated in the heart of Luiseño territory, which roughly encompassed an area from Agua Hedionda on the coast, east to Lake Henshaw, north into Riverside County, and west through San Juan Capistrano to the coast (Becker and Iversen 2009).

The Luiseño were hunter–gatherers, and as such their settlement patterns were heavily influenced by subsistence factors. It appears that these settlement patterns were flexible and rarely took the form of year-round sedentary villages. Instead, they exploited the seasonal fluctuations in resources through annual movements of populations from mountain slopes and highlands to valley floors and coastal strips. Communities utilized one to three camps per year, with the duration and location of settlement camps varying with the availability of plant and animal resources. The Luiseño diet comprised both plant and animal foods, and their hunting was accomplished by individuals and groups using bows and arrows (Becker and Iversen 2009).

By the early 1820s California had come under Mexico’s rule, and in 1834 the missions were secularized. California became a sovereign state in 1850. The City of Oceanside was incorporated in 1888; however, the community’s European history began nearly a century before its incorporation with the establishment of the San Luis Rey Mission (City of Oceanside 2002, Introduction, p. 1). The Oceanside General Plan identifies three significant historical sites within its jurisdictional boundary: the San Luis Rey Mission, Rancho Guajome, and the Grave of Francisco de Ulloa. In addition, the General Plan states that archaeological sites have been reported in the Fire Mountain area and in the Guajome Lake region. None of these historical or archaeological sites are located within the project vicinity.

The City of Carlsbad developed around the turn of the twentieth century as a rail stop situated on the southern side of the Buena Vista Lagoon. The City of Carlsbad takes its name from Karlsbad, Bohemia, due to the presence of similarly high-quality mineral waters in both cities. From its inception it has been a “quaint village-by-the-sea” (City of Carlsbad 2015). The City of Carlsbad was incorporated as a general law city in 1952, and through a series of annexations beginning in the 1960s grew in both population and in area. The Carlsbad General Plan does not identify any historical or archaeological sites within its jurisdictional boundary.

### **Background – Paleontological Setting**

Paleontological resources, or fossils, are the remains of prehistoric (11,000 years old or older) plant and animal life. These resources include bones, teeth, shells, leaves, and wood, as well as the geologic formations in which these fossil remains are buried and subsequently found (Appendix I, p. 1).

The project area is underlain by artificial fill materials ranging from a depth of 4 to 10 feet. It is thought that these fill materials, consisting primarily of clayey silt/silty clay with some silty sand, were derived from earlier construction activities in the area and were used to create topographically high areas for current and future development (Appendix I, p. 5). Underneath these relatively youthful fill materials are older geologic deposits mapped as Pleistocene-age alluvium and Eocene-age sedimentary rocks of the Santiago Formation. Pleistocene alluvial deposits surround the project area, and the Santiago Formation is mapped to the north, south, and east just beyond the project site. East of the project area, older crystalline bedrock has been mapped as Cretaceous-age plutonic rocks of the Peninsular Ranges Batholith (Appendix I, p. 4).

No fossils of paleontological interest are contained in the artificial fill materials, as any organic remains within them have lost their original stratigraphic and geologic context. These artificial fill materials are therefore assigned a paleontological resource sensitivity of zero (Appendix I, p. 6).

However, fossils have locally occurred in Pleistocene-age deposits exposed in Oceanside and Carlsbad. These fossils primarily consist of well-preserved shells and tests of nearshore marine invertebrates, such as clams, oysters, and sand dollars, though sparse remains of marine vertebrates have also been recovered. These fossils are significant and are approximately 120,000 to 300,000 years old. Pleistocene-age deposits of marine and non-marine invertebrates, marine vertebrates, and terrestrial vertebrates were uncovered during grading activities at the nearby Pacific Coast Plaza and The Summit at Carlsbad, located to the north and to the south of State Route 78, respectively (Appendix I, p. 6).

## **Field Reconnaissance Results**

### ***Cultural***

An archaeological field survey was conducted at the project site on September 29, 2004, and May 17, 2010, by ASM archaeologist Micah Hale. The May 17, 2010, survey was conducted to cover the new project area (associated with the proposed bridge) and to confirm the results of the September 29, 2004, survey. The surveys involved walking east–west transects spaced no more than 33 feet (10 meters) apart. Although no cultural resources were identified, a large amount of marine shell was found on the surface throughout the project area, and was most concentrated in the western half of the project. The report indicates that this shell derives from lagoon restoration material brought to the project site that was subsequently graded and dispersed (Appendix H).

### ***Paleontological Resources***

A paleontological survey of the project area and immediately surrounding areas was conducted in 2010 by San Diego Natural History Museum personnel. The purpose of this survey was to verify the results of the literature and record searches and to determine the paleontological resource sensitivity of the geological units that would be affected by the proposed project (Appendix I, p. 4).

The majority of the project area was covered with artificial fill at the surface. Pleistocene alluvial deposits were found surrounding the project area, and are presumably below the artificial fill materials located on site. The Santiago Formation was not encountered below the Pleistocene alluvium during a previous site-specific geotechnical investigation (Appendix I, p. 4).

## **Record Search**

### ***Cultural/Archaeological Resources***

Although a records search was previously completed for the initial Cultural Resources Inventory, a new records search was conducted on May 15, 2010, at the South Coastal Information Center. The search encompassed a 1-mile radius around the project area and identified 2 isolated artifacts and 21 prehistoric sites, none of which are located within the project area itself. Within the 1-mile radius, 59 other cultural resources studies have also been conducted, 4 of which are linear surveys associated with State Route 78 that border or intersect the project area. None of these studies identified cultural resources in or adjacent to the current project area (Appendix H).

Native American consultation was initiated on October 10, 2004, at the time of the first Cultural Resources Inventory. It was determined that the results of this contact remained valid for the current project, and no new consultation was initiated.

### ***Historical Resources***

A records search conducted at the South Coastal Information Center (see (Appendix H) revealed that eight historic addresses are located within a 1-mile radius of the project site:

- 1317 Kelly Street
- 1594 Kelly Street
- 1840 Campesino Place
- 2215 Fire Mountain Drive
- 2305 Carriage Circle
- 2524 Davis Avenue
- 2530 Davis Avenue
- 2565 Pio Pico Drive

None of these historic properties is located within the proposed project area.

### *Paleontological Resources*

The San Diego Natural History Museum has recorded 15 paleontological collecting sites in correlative deposits as exposed within 1 mile of the proposed project area (refer to Figure F in Appendix I). These sites are located in the City of Oceanside to the northwest and in the City of Carlsbad to the southeast. As previously mentioned, Pleistocene-age deposits were found during grading activities at the nearby Pacific Coast Plaza and The Summit at Carlsbad. However, no previous records of fossil localities occurring in the Pleistocene alluvial deposits within the project area were found (Appendix I, p. 6).

#### **4.6.3 Thresholds of Significance**

Based on the significance criteria established by Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would generally occur as a result of project implementation if the project would:

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

#### **4.6.4 Environmental Impacts**

1. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*

As described in Section 4.6.2, site records on file at the South Coastal Information Center indicated that eight historic properties were located within a 1-mile radius of the proposed project site. Based on the review of South Coastal Information Center's map and database of historic addresses, none of the historic properties were located within or immediately adjacent to the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource, and impacts would be less than significant.

2. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

As stated in the Cultural Resource Inventory Update completed by ASM, no cultural or archaeological resources have been previously recorded within the project site (see Appendix H). In addition, the pedestrian surveys conducted in September 2004 and May

2010 did not find any cultural resources within the project area. However, 2 isolated artifacts and 21 prehistoric sites have been previously recorded within a 1-mile radius of the project site. This relatively large number of sites surrounding the project area, in addition to the lagoonal setting, indicates heightened archaeological sensitivity. Therefore, the potential to encounter previously unknown archaeological resources during grading or excavation creates the possibility for a substantial adverse change in the significance of an archaeological resource, and impacts would be potentially significant.

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

The Paleontological Resource Assessment indicates that the artificial fill materials on site are considered to have zero paleontological resource sensitivity due to their disturbed nature (Appendix I, p. 6). The report also states that there are no previous records of fossil localities in the Pleistocene alluvial deposits within the project's area of potential effect. However, because 15 paleontological collecting sites have been recorded within 1 mile of the project area, and in light of the paleontological guidelines developed by the County of San Diego, the Quaternary alluvial deposits on site are considered to be highly sensitive. Therefore, the potential exists to encounter previously unknown paleontological resources during grading or excavation, and impacts would be potentially significant.

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

The project area is not currently used as a cemetery and is not otherwise known to contain human remains. However, this does not preclude finding human remains during project excavation and grading activities. Disturbance of any unknown human remains would be a potentially significant impact. However, as standard construction practice, should any human remains be encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur in the immediate area until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code Section 5097.98. In addition, in accordance with CEQA Guidelines Section 15064.5(e), if the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours for identification of the most likely descended from the deceased Native American. Consequently, the project's adherence to the State Health and Safety Codes and CEQA Guidelines would ensure that any potential impacts remain below a level of significance.

## 4.6.5 Level of Significance Prior to Mitigation

The potential for impacts to undiscovered cultural/archaeological and paleontological resources exists during construction activities at the project site. Impacts would be considered significant without the implementation of the mitigation measures (MMs) provided below.

## 4.6.6 Mitigation Measures

### Archaeological/Cultural Resources

**MM-CR-1** Prior to the issuance of a Grading Permit, the Applicant/Owner shall enter into a pre-excavation agreement with a representative of the San Luis Rey Band of Mission Indians, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement. The Applicant/Owner shall submit a copy of the executed agreement with the Grading Permit application. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant/Owner and the San Luis Rey Band for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, grading, and all other ground disturbing activities.

**MM-CR-2** Prior to the issuance of a Grading Permit, the Applicant/Owner shall provide a copy of an executed contract to the City of Oceanside Planning Division providing that a Qualified Archaeologist and Luiseño Native American Monitor have been retained at the Applicant/Owner expense to implement the monitoring program, as described in the pre-excavation agreement.

**MM-CR-3** Prior to the release of the grading bond, the Qualified Archaeologist will have submitted a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the archaeological monitoring program (e.g., data recovery plan), along with the Luiseño Native American Monitor's notes and comments, to the City of Oceanside Planning Division for review and acceptance.

**MM-CR-4** The Qualified Archaeologist shall maintain ongoing collaborative consultation with the Luiseño Native American monitor during all ground disturbing activities (i.e. grubbing, clearing, grading, cutting, filling, trenching and/or boring). The requirement for the monitoring program shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner shall not begin

any ground disturbing activities until they have provided the City of Oceanside Planning Division with a schedule of ground disturbing activities and until the Qualified Archaeologist and Luiseño Native American Monitor are on-site to conduct monitoring of all ground disturbing activities.

**MM-CR-5** The City will invite the Qualified Archaeologist and Luiseño Native American Monitor to attend all applicable pre-construction meetings with the General Contractor and/or associated Subcontractors to present the archaeological monitoring program. The Qualified Archaeologist and Luiseño Native American Monitor shall be present on-site full-time during any ground disturbing activities, to identify any evidence of potential archaeological or tribal cultural resources. All fill materials shall be subject to appropriate and reasonable testing or sampling by the Qualified Archaeologist and Luiseño Native American Monitor to assure the recovery of any and all tribal cultural resources.

**MM-CR-6** The Qualified Archaeologist or the Luiseño Native American monitor may halt ground disturbing activities if unknown archaeological artifact deposits or cultural features are discovered. Ground disturbing activities shall be directed away from these deposits to allow a determination of potential importance. Isolates and clearly non-significant deposits will be minimally documented in the field, and before grading proceeds these items shall be given to the San Luis Rey Band so that they may be repatriated at the site on a later date. If the Qualified Archaeologist or Luiseño Native American Monitor determine that the unearthed artifact deposits or cultural features are considered potentially significant, they shall notify and consult with the San Luis Rey Band of Mission Indians to determine the respectful and dignified treatment of those resources. The avoidance and protection of the significant cultural resource and/or unique archaeological resource is the preferable mitigation.

If the Qualified Archaeologist recommends and the City requires a data recovery plan, the San Luis Rey Band shall be notified and consulted regarding the preparation and scope of any such recovery plan. If the Qualified Archaeologist collects any artifact deposit samples as part of the data recovery plan, the Luiseño Native American monitor shall be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect any artifact deposit samples that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may at their discretion, collect said resources and provide them to the San Luis Rey Band for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions.

All archaeological material collected will be curated at a federally-recognized local repository at the completion of the project, excluding Native American grave goods or other sensitive remains, and absent a separate negotiated arrangement with the City for collections disposition.

**MM-CR-7** Any and all uncovered tribal cultural resources of Native American importance shall be returned to the San Luis Rey Band of Mission Indians, and/or the Most Likely Descendant.

**MM-CR-8** As mandated by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, or the Qualified Archaeologist shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. By law, the Coroner will determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner determines that the remains are Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then make a determination as to the Most Likely Descendant. Any Native American remains discovered on the project site shall be kept in-situ, or in a secure location in close proximity to where they were found, and any analysis of the remains shall only occur on-site in the presence of a Luiseño Native American monitor. At the conclusion of any analysis, any Native American remains shall be repatriated to the Most Likely Descendant for re-burial, in accordance with PRC 5097.98.

~~MM-CR-1 — A qualified archaeologist and a Luiseño Native American monitor shall be present to monitor all ground disturbing activities (including off-site and on-site activities). Archaeological monitoring shall be implemented during grading and excavation for the proposed project. Prior to initiation of ground disturbing activities, the archaeological monitor shall conduct a brief awareness training session for the benefit of all construction workers and supervisory personnel. The training, which could be held in conjunction with the project's initial on-site safety meeting, will explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains/burials are uncovered during ground disturbing activities. These procedures include curtailing or redirecting work and immediately contacting the~~

site supervisor and the archaeological monitor. The worker education session shall include visual images of artifacts that might be found in the project vicinity, and the session shall take place on site immediately prior to the start of ground-disturbing activities. Particular monitoring attention shall be paid to the boundary between the fill material and the underlying sediments to ensure that interpretation of the subsurface natural context is not biased by contamination with the shell from the fill material.

~~MM-CR-2~~ The applicant shall enter into a Cultural Resources Treatment and Tribal Monitoring Agreement, otherwise known as a Pre-Excavation Agreement with the San Luis Rey Band of Mission Indians (Tribe) prior to commencement of any ground-disturbing activities. The author of the archaeological monitoring program shall be in consultation with the Tribe to ensure that potential resources that may be impacted and/or affected be treated with dignity and respect.

~~The agreement shall contain provisions to address the proper treatment of any cultural resources or Luiseño Native American human remains inadvertently uncovered during the course of the project. The agreement shall also outline the roles and powers of the Luiseño Native American monitors and the archaeologist. The monitoring agreement shall specify that all deposits or other cultural resources shall be evaluated by both the archaeologist and the Luiseño Native American monitor for evaluation and determination as to whether the deposits are non-significant or significant in accordance with CEQA Guidelines Section 15064.5. In addition, any such uncovered artifacts of Luiseño Native American cultural importance shall be returned to the Tribe and/or if applicable to the Most Likely Descendant as determined by the Native American Heritage Commission, and shall not be curated.~~

~~MM-CR-3~~ If cultural resources are discovered during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Native American monitor and the archaeologist can assess the nature and significance of the find in accordance to California Public Resources Code 21083.2.

~~MM-CR-4~~ If Native American remains and/or associated burial goods are unearthed, prior to a Most Likely Descendant being determined by the Native American Heritage Commission, the suspected Native American remains shall be kept in place, or in a secure location in close proximity to their discovery, and a forensic anthropologist shall perform their analysis of the remains on site in the presence of a Luiseño Native American monitor.

~~MM-CR-5~~ All proposed fill material shall be clean of cultural resources and documented as such. Fill materials utilized from within the project boundaries shall also be analyzed and confirmed by an archaeologist and/or Luiseño Native American monitor that such fill material does not contain cultural resources.

### **Paleontological Resources**

**MM-CR-96** A qualified paleontologist shall attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a master's degree or doctorate in paleontology or geology that is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the county for at least 1 year.

**MM-CR-107** A paleontological monitor shall be on site full time during the original cutting of previously undisturbed deposits of high paleontological resource potential (Pleistocene alluvial deposits) to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.

**MM-CR-118** If fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for recovering small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on the site.

**MM-CR-129** Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, and cataloged as part of the mitigation program.

**MM-CR-130** Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with a permanent paleontological collection, such as the San Diego Natural History Museum. Donation of the fossils should be accompanied by financial support for initial specimen storage.

**MM-CR-141** A final summary report shall be completed that outlines the results of the mitigation program. This report should include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

#### **4.6.7 Level of Significance After Mitigation**

Implementation of MM-CR-1 through MM-CR-~~5~~8 would reduce potential impacts to unknown cultural resources during ground-disturbing activities during the construction phase. MM-CR-~~6~~9 through MM-CR-~~14~~1 would ensure that project impacts to paleontological resources are mitigated to a level below significance. No residual impacts are expected.