4.4 CULTURAL RESOURCES

This section evaluates the potential effects of the proposed project on cultural resources, including historical, archaeological, paleontological, unique geologic features, and human remains. The information contained in this section is based on the results of *the Archaeological Survey Report for the Carmel Lagoon Project, Carmel-by-the-Sea, Monterey County, California* (Archaeological Survey Report) prepared by Anthropological Studies Center (ASC) in February 2016. This report is on file with the County and serves as the basis of the analysis contained herein. Due to the sensitivity of the proposed project area, the Archaeological Survey Report will not be available for public distribution. Information contained in this section was also obtained from available documentation contained in the 1982 Monterey County General Plan, as well as other applicable background documents. The following subsections include a brief discussion of the regional historic context, as well as the findings of the technical resource evaluations prepared in support of the proposed project.

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance. Significant cultural resources may be historical resources (i.e., cultural resources eligible for inclusion on the California Register of Historical Resources [CRHR]) or unique archaeological resource as defined in CEQA. Cultural resources encompass paleontological, archaeological, and historic resources as briefly summarized below:

- Paleontological Resources: Paleontology is the study of plant and animal fossils. Generally, paleontological resources are more than 10,000 years old.
- Archaeological Resources: Archaeology is the study of prehistoric human activities and cultures. Archaeological resources are associated with indigenous cultures and historic-era settlement and are less than 10,000 years old.
- Historic Resources: Historic resources (extant buildings and structures) are associated with the more recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the state's history and are usually less than 200 years old.
- Tribal Cultural Resources: Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (PRC Section 21074).

Public and agency comments related to cultural resources were received during the public scoping period, and are summarized below:

- Analyze all potentially significant effects on historic resources and identify mitigation measures.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the CEQA and/or are raised by responsible agencies, they are identified and addressed within this EIR. For a complete list of public comments received during the public scoping period, please refer to **Appendix A**, **NOP and Public Comment Letters.**

4.4.1 Environmental Setting

4.4.1.1 Regional Overview

The proposed project is located in a culturally diverse landscape that includes a variety of cultural resources that are illustrative of regions rich and diverse history. As described below, early human settlement of the California Coast began at least 10,000 years ago. Settlement of the coastal areas of Monterey County; however, did not begin until around 5,000 B.C. The proposed project is located within the ethnographic territory of the Costanoan (or Ohlone) language family. The Costanoan followed a hunting and gathering subsistence pattern and relied heavily only the natural acorn crop. This group also lived a semi-sedentary lifestyle, generally occupying sites near the confluence of streams or near springs. This section includes generalized information related to the region's prehistoric, historic, and ethnographic setting. A detailed description of the proposed project's Archaeological Area of Potential Effects (APE)[1] is also described below.

4.4.1.2 Prehistoric Setting

The Central Coast is defined as the region south of San Francisco Bay stretching to the Southern California Bight, including the South or Central Coast Ranges west of the Central Valley and including the counties of Santa Clara, San Benito, Santa Cruz, Monterey, and San Luis Obispo, and portions of Kings, Merced, and Fresno counties.

Carmel lies within the northern half of this region and has a rich history of human settlement. The region was characterized by Moratto's California Archaeology (1984) and updated in California Prehistory (2007) edited by Terry Jones and Katherine Klar. Moratto's work relied heavily on a taxonomic framework developed by Fredrickson (1973, 1974) that outlines three basic periods: the Paleo-Indian, Archaic, and Emergent. Jones et al. (2007) have compiled new data from the last 20 years and a regional culture history documents variability and continuity in Central Coast populations over the past 10,000 years. This occupation has been broken down into six broad periods: the Paleoindian period (pre-8,000 B.C.), Early Archaic or Millingstone (8,000 to 3,500 B.C.), and a Hunting Culture, which spans Early (3,500 to 600 B.C.), Middle (600 B.C. to A.D. 1,000), and Middle/Late Transition (A.D. 1,000 to 1,250) periods, followed by a Late period (A.D. 1,250 to 1769). Each of these periods is briefly summarized below.

PALEOINDIAN PERIOD (PRE-8,000 B.C.)

The Paleoindian period was a time of great climatic and environmental change. Very little is known about the environment of the region, due to a short and little studied pollen record. Evidence such as geomorphic soil studies, vertebrate fossils, and archaeology suggest a mosaic of oak woodland, chaparral, and coastal sage scrub communities replaced pine and juniper-cypress during this period. Archaeological evidence for this period is scarce and usually only dated by the presence of diagnostic artifacts such as fluted Clovis projectile points. These have been found in Nipomo, at the southern end of the Central Coast. No other substantive components dating to this period have been identified.

[1] The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE was developed to identify all areas where construction-related ground-disturbance could occur and is further explained in **Section 4.4.1.5** below.

MILLINGSTONE CULTURE OR EARLY ARCHAIC (8,000 TO 3,500 YEARS B.C.)

The Millingstone phase is marked by large numbers of well-made handstones and milling slabs, crude core and cobble-core tools, and less flake tools and large side-notched projectile points. Pitted stones are also present along with a small number of contracting stemmed points. Occasional lanceolate points and crescents have been noted within this period as well, at sites within Monterey County. Millingstone sites have been identified in a range of settings, including open coastline, within estuaries, and near shore interior valleys. Few sites are found further inland (more than 15 miles from the coastline). Most of these interior sites exhibit marine shells indicating that inhabitants were still exploiting coastal resources and maintained a connection to the coast.

The so-called Millingstone people practiced a broad-spectrum hunting and gathering subsistence. While they exploited birds and mammals, diet consisted predominantly of shellfish and fish. Remains from deer and rabbit are commonly associated within this period, but stable isotope analysis from a site in Santa Cruz County indicated that 70-84 percent of the diet consisted of marine food.

HUNTING CULTURE (3,500 YEARS B.C. TO A.D. 1,250)

At the end of the Millingstone period, the Central Coast saw an increase in large projectile points most often associated with the establishment of new settlements. The so-called Hunting Culture typology has been refined over recent years and while small variances occur between Early and Middle periods, "splitting" approaches have proven less useful than "lumping" systems. During this period people retained a preference for coastal habitation, though an increasing number of sites have been located within interior valleys.

The Early Period is marked by the co-occurrence of contracting stemmed and Rossi square-stemmed points and large side-notched variants. Earlier handstones and milling slabs are retained within this period, but portable mortars and pestles appear for the first time in small numbers. Cobble-core tools are less frequent and fishing equipment is limited to bone gorges. On the Monterey Peninsula, this phase includes the Saunders. Burials during this period are flexed and are often accompanied by Rossi square-stemmed points, fish gorges, and square beads.

During the Middle Period, the Hunting Culture is represented by a number of sites throughout the Central Coast. During this time, contracting-stemmed points are retained and square-stemmed and large side-notched points disappear. Groundstone assemblages remain much the same with continued use of handstones, milling slabs, and portable mortars and pestles. Beads transition to saucers and circular shell fishhooks appear for the first time. Pitted stone artifacts and grooved stone net sinkers are also common at Middle Periods sites. Graves dating to this time show continued preference for a flexed position and often include bone tubes and large quantities of beads. Near the end of the period smaller leaf-shaped projectile points become more common, indicating the introduction of the bow and arrow.

Faunal assemblages from the Hunting Culture show variability of species, with Early Period sites mostly composed of deer, rabbits, and sea otters. Fish remains increased during the Early Period, but rises were most dramatic during the Middle Period. Shellfish remained an important dietary component, but their presence decreased as reliance on vertebrates increased.

LATE PERIOD (A.D. 1,250 TO 1,769)

Dramatic changes occurred across the Central Coast after A.D. 1,000. The Hunting Culture transitioned gradually in some places and more rapidly in others, but is consistently marked by a clear shift in artifact assemblages.

An increase in Desert side-notched and Cottonwood arrow points, small bifacial bead drills, bedrock mortars, hopper mortars, lipped and cupped shell beads, and steatite disk beads set the Late Period apart from the preceding periods. Bead manufacture became increasingly important across the Central Coast and most sites from this period produce bead drills and *Olivella* bead manufacturing debris.

The Late Period is characterized by single-component sites. Many of these are located away from the shoreline and are within a variety of environmental settings. Typical sites are marked by small middens with associated or nearby bedrock mortars. While larger sites have been documented, Late Period middens tend to be small with several discrete deposits in one area. There is a remarkably strong consistency between Late Period assemblages, site types, and settlement patterns throughout the region.

4.4.1.3 Ethnographic Setting

The proposed project area is situated within the ancestral territory of the Ohlone, or Costanoan. The term Costanoan denotes a language family consisting of eight distinct languages: Karkin, Chochenyon, Ramaytush, Awaswas, Tamyen, Mutsun, Rumsen, and Chalon. The proposed project area falls within the center of the Rumsen language area. Costanoan territory spans the East and South Bay peninsula as far south as Big Sur. The eastern boundary is less well established, but was likely the interior Coast Range.

Due to varying accounts from a range of time periods, descriptions of Costanoan culture may not reflect all linguistic groups at all times. Great variance occurs between groups, terrain, and after-effects of contact. In 1770, the Costanoan-speaking people resided in approximately 50 separate, politically autonomous tribelets. Each of these had 50 to 500 members and one or more permanent village sites. The Costanoan recognized distinct ethnic groups by language and contiguous area. Often these differences were slight variances within dialects. Each branch of the Costanoan family was denoted by a different language. Linguistic evidence suggests that the ancestors of Costanoan speakers entered the San Francisco and Monterey Bay areas around A.D. 500, moving south and west from the Sacramento River delta system.

This roughly corresponds to the Late Period association, possibly explaining the dramatic shift in artifact assemblages at this time. Costanoan speakers were organized into small groups commonly referred to as tribelets; these autonomous groups consisted of a main village, several satellite villages, and temporary camps as throughout most of native California. Tribelet territories were well established and based on physiographic features. Leaders could be of either sex, but the office was inherited patrilineally. Elected by the community, leaders were responsible for feeding guests, providing for the poor, directing ceremonial gatherings, caring for captive grizzly bears and coyotes, and directing hunting, fishing, gathering, and warfare expeditions. Households were large, averaging 10 to 15 people, and consisted of several generations. Houses were often domed structures thatched with tule, grass, wild alfalfa, ferns, or carrizo. Other structures included sweat houses, dance enclosures, and assembly houses.

Ohlone used tule balsa watercraft propelled with double-bladed paddles to navigate the large network of waterways within their territory. Boats were used for transportation, hunting, and fishing. Bows were commonly used and made of sinew or vegetable fiber. Nets were used to hunt small birds and rabbits. Cordage was made from milkweed fibers, Indian hemp, or nettle. Sea otter, rabbit, and duck skins were used to make blankets and bedding. Baskets were used in the collection, preparation, and storage of food and as such were made in a variety of shapes and sizes.

Ohlone people used a wide variety of resources in their diet, often improving yields through sustainable management of the land. Controlled burning was undertaken over extensive areas each fall to promote growth and prevent chaparral. Acorns were likely the most important food resource; and four species of oak are present within Costanoan territory. Buckeye, bay laurel, hazelnuts, and pine nuts were also commonly eaten along with a variety of berries and roots. Mammals consumed included black tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, whale, dog, wildcat, skunk, raccoon, rabbit, squirrel, rat, and mole. Waterfowl were also significant sources of food for Costanoan peoples. Several species of fish and shellfish were consumed as well, with mussels, clams, and abalone being among the most common.

Conflict was part of Costanoan life. Wars were waged between linguistic groups and tribelets, as well as with neighboring Esselen, Salinan, and Northern Valley Yokuts. Fighting usually arose over infringement of territorial rights and was conducted by surprise attack or by prearranged meeting. Trading between groups was common, with the main trading partners being the Plains Miwok, Sierra Miwok, and Yokuts. Costanoan people brought a variety of shellfish, salt, and *Olivella* shells to their inland neighbors and received piñon nuts in return.

The arrival of European missionaries and explorers greatly impacted Native people throughout California. Contact with Europeans came early within Costanoan history. The first contact was likely between the Vizcaíno expedition and Rumsen speakers in 1602. Costanoan populations were subject to the destructive forces of missionization, disease, displacement, and development that took place during California's early history. Seven missions were established within Costanoan territory between 1770 and 1797. Population estimates for the mission period suggest that less than 20 percent of their population remained by 1834. Cataclysmic changes took place within the native subsistence economy, ritual, and social activities as a result.

After mission secularization, the Costanoan experienced a second displacement as Mission lands and property were supposed to be redistributed to native populations but few were designated and most of the land went to administrators and Rancherias. Most Costanoan gradually left the missions to work as manual laborers and some returned to native practices for a time. Multiethnic communities of displaced Indians were formed throughout the region, consisting of a diverse mix of Coast, Bay, and Plains Miwok, Patwin, Yokuts, and Esselen people. Several of these groups continue to petition the Federal government for reaffirmation as a federally recognized tribe.

4.4.1.4 Historical Setting

The Spanish were the first Europeans to explore the Monterey Peninsula, in the late 1760s and 1770s. After their initial exploration, the Spanish focused on the founding of presidios, missions, and secular towns. After the independence of Mexico and the secularization of the missions in the 1830s, the missions' property was divided into ranchos and distributed to private citizens. The following is a brief description of the various historic periods, as well as a discussion of the local historical context within the APE.

EARLY EXPLORATION

The first documented exploration of the area took place as early as 1542 when Juan Rodríguez Cabrillo sailed up the coast of California. While Cabrillo reportedly just sailed past, Sebastían Rodríguez Cermeño entered the bay in 1595. It was not until 1602 that Sebastían Vizcaíno landed and took possession of the area for Spain. Vizcaino discovered the Carmel River in 1603 and called it Río del Carmelo. Gaspar de Portola's land expedition passed through the region in 1769 and returned in 1770

accompanied by a colonizing party and Franciscan fathers Crespí and Serra. Mission San Carlos Borroméo de Carmelo was established in 1770 by Father Junipero Serra, but within a year it was moved to Carmel, adjacent to the APE. At the same time, the Presidio of Monterey was established and became a military and social capital of Alta California. Father Junipero Serra also established the Mission San Antonio de Padua near present day Fort Hunter Ligget, and Father Lasuen founded Mission Nuestra Señora Dolorsísima de la Soledad nearby.

The Carmel Mission was built of wood and surrounded by a stockade. It included a chapel, a four-room dwelling, a granary, a boy's dormitory, and a kitchen, as well as a room for the guards. Within sight of the compound were corrals for mules and cattle and a garden. Additional buildings were added in the years following its founding. Between 1806 and 1816, the Carmel Mission reported that it had built 52 dwellings for mission Indians, male and female hospital buildings, a new chapel, and completely enclosed the mission quadrangle.

The mission population of native Californians peaked in 1795 at 878 and dwindled to 397 by 1819, likely due to disease and desertion rates. Reports ceased during the fight for Mexican independence. When reports resumed in 1823, the population had slipped further to only 317 and the mission reported that portions of the complex were falling into ruin due to labor shortages. This trend continued until 1832 when the missions were secularized. After secularization, the Carmel Mission lost lands and herds as well as neophyte converts and the property fell into disrepair.

MEXICAN PERIOD

The Spanish, and later Mexican government, encouraged settlement of territory within California through the establishment of large land grants called ranchos. Most grantees raised livestock. Laborers were pressured into service on ranchos, including Native Californians, after secularization in 1832, many of them former Mission residents. Land grants were often given to prominent figures as reward for services rendered to the government or as favors to connected relatives. Ranchos were frequently based on geography, with their boundaries following prominent watercourses, mountains, or valleys.

In 1843, Governor Micheltorena granted José Antonio Romero a part of the town of San Carlos (Carmel) on the flat between the highway, the river, and the mission orchard. His land may constitute a portion of the current APE. The mission lands were separated in 1845 and sold at auction the following year.

The United States declared war against Mexico in 1846 beginning with the Bear Flag Revolt in Sonoma on June 15th. The Treaty of Guadalupe Hidalgo, signed on February 2, 1848, ended the war and incorporated California as a territory of the United States. The treaty provided that Mexican land grants would be honored if they could be confirmed through proof of title.

Numerous land grants were made by the Mexican government between 1842 and 1846 within Monterey County. Nearby San José y Sur Chiquito and Cañada de la Segunda land grants used the Carmel River as their boundary.

4.4.1.5 Local Setting

ARCHAEOLOGICAL AREA OF POTENTIAL EFFECTS

The proposed Archaeological APE is located within and adjacent to the Carmel River State Beach and Lagoon between Highway 1 and the Pacific Ocean in the unincorporated Carmel area of Monterey County, California. The proposed APE lies within an unsectioned portion of T16S, R1W, as depicted on the Monterey, California 7.5' topographic map (**Figure 4.4-1**).

Archaeological Area of Potential Effects (APE)

N

Source: Anthropological Studies Center

Archaeological Area of Potential Effects

Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Date 3-9-16

Scale

Figure 4.4-1

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The proposed APE consists of approximately 40 acres on the northern edge of the Lagoon and spans the length of the Carmel Lagoon from Mission San Carlos Borroméo on the east to the Carmel River State Beach on the west. The proposed archaeological APE begins at a driveway on the eastern edge of Mission Ranch south of Dolores Street, and continues west within the lower Mission Ranch for approximately 200 feet, branching north to include an existing bypass storm drain. It continues west 332 feet following the Federal Emergency Management Agency (FEMA) boundary, again branching north to include the main Mission Ranch driveway. The APE continues west along the FEMA boundary through the sheep pasture to Carmel River Elementary School; the proposed APE includes the school playing field and track. The APE then follows the FEMA boundary 850 feet west along 16th Avenue to Camino Real and between houses to Carmelo Street. It continues south on the west shoulder of Carmelo Street for 900 feet and includes the intersection of Carmelo Street and 17th Avenue. The APE then turns west and north following the eastern edge of Scenic Road for 1,100 feet. At Isabella Avenue, it continues south (down slope) onto Carmel River State Beach and follows the approximate mean high water line for 1,200 feet before turning back 1,200 feet north to encompass the State Beach parking lot. It then continues east within the Lagoon for 940 feet, crosses CUSD property, and re-enters the Mission Ranch sheep pasture following the Carmel River back to the start.

The vertical APE varies by proposed project component. It extends to a maximum of 30 feet below existing grade within the Lagoon for installation of the proposed EPB project component and supporting infrastructure. The vertical APE for the proposed SRPS project component portion will extend up to 20 feet below grade. Excavation for the proposed ISMP project component will vary depending on Lagoon level, but will generally extend 1 to 2 feet below the existing beach surface into the sandbar.

HISTORY OF CARMEL-BY-THE-SEA AND DEVELOPMENT WITHIN THE APE

Between 1846 and 1856, the lands surrounding the Carmel Mission and town of San Carlos passed through several hands, though the land likely remained mostly vacant. In 1859, the lands were sold to the Martin brothers. The Martin brothers and their father William operated several farming operations within Monterey County. John Martin and his wife Elizabeth settled into old mission buildings before building and operating a dairy farm. John Martin's stepson, Andrew Stewart, continued to operate the dairy until 1916, supplying Carmel with milk.

An 1873 topographic map depicts the location of the Carmel Mission and an identified building along the Carmel River's northern bank within the vicinity of the APE. An 1876 Coast Survey map depicts the area and the location of John Martin's residence and fields within the northeastern portion of the APE. It also shows the location of the Carmel Mission and associated fields immediately east of the APE as the only development in the area.

In 1888, Santiago J. Duckworth purchased 324 acres of land from Honoré Escolle, a prominent early resident of Monterey, and filed a subdivision map for Carmel City. Duckworth, already established in the real estate business in Monterey, planned to develop Carmel City as a summer resort for Catholics, akin to the Methodist retreat already established in Pacific Grove.

In the first few years, development of Carmel City seemed to be advancing. But by the early 1890s Duckworth's plans began to collapse as the boom of the 1880s turned into the depression of the 1890s. Sales continued to decline and in 1902 James F. Devendorf took over the unsold land from Duckworth. He and San Francisco lawyer, Frank H. Powers, formed the Carmel Development Company.

Lot sales in the City were initially slow. By 1905 there were 75 residents, several stores, a restaurant, a school and hotel. By 1913, there were over 500 permanent residents and summer tourists expanded that number to thousands. The post office was established in 1903 and the town was incorporated in

1916. By 1911, Devendorf reported that over 60 percent of residents were connected to aesthetic arts and a thriving artist colony formed by the 1920s.

A 1913 United States Geological Survey (USGS) map shows the Coast Road in place, following a similar route as present day Highway 1, and portions of Carmel north of the APE had begun to fill with residential development. A single dirt road led south to Carmel Point following the current route of Carmelo Street and Scenic Road to two structures located on the bluff.

Willis Walker, a successful lumber dealer and San Francisco socialite, purchased the Martin ranch in 1926. The Walkers subdivided the land and turned the ranch into a riding and country club. Homes were built within the Walker Tract along the Lagoon edge below Santa Lucia Avenue. In 1937, a stage was built in the barn and the Valley Ranch Club and Dance Hall was opened. The ranch changed hands again in 1940 when the Dienelt family purchased the land. They continued running the resort until 1976.

The City maintained a small village character throughout the 1930s and 1940s. In 1937, Highway 1 was completed between San Simeon and Carmel and allowed traffic to flow from Southern California to the Monterey Peninsula. By 1941, Carmel had developed and expanded to include Carmel Point. Most of the current road alignments were in place and residences beginning to fill the peninsula.

Partially in reaction to this boom, the City drafted a plan to preserve the primarily residential character of the community. The plan called for numerous changes that would limit tourist development and "inappropriate commercialization." Though some portions were adopted, the town continued to grow as a tourist location. A 1947 topographic map shows the Mission Ranch resort complex and Scenic Road connecting to Carmelo Street on the point. The same arrangement is present on the 1960 USGS map.

In the early 1980s, the Martin ranch property was divided into several pieces. The State of California acquired the land surrounding the Lagoon and beach. CUSD purchased the property west of Mission Ranch for the Carmel River Elementary School. The Dienelts sold four acres south of the Carmel Mission for the Carmel Youth Baseball Field, and gave the Carmel Mission four acres. The main ranch was sold to the Mission Ranch Corporation, a development company planning to build residential units. In 1984, the City filed a lawsuit to block development and made a move to purchase the ranch. Purchase by the City fell through and in 1986 Mission Ranch was purchased by then-mayor Clint Eastwood. Eastwood restored the existing ranch buildings and rebuilt cottages in the style of former buildings and continues to operate the inn and resort.

4.4.1.6 Cultural Resources in the Vicinity of the Proposed Project

ARCHAEOLOGICAL METHODS, SURVEYS, AND RESULTS

An archival records search for the proposed project area was conducted by ASC at the Northwest Information Center of Sonoma State University (NWIC) on July 30, 2015. Additional research was conducted using the files and literature of ASC. The records search and literature review for this study was done (1) to determine whether known archaeological or historic resources are within the APE; and (2) to determine the likelihood of unrecorded resources based on historical references and the distribution and environmental settings of nearby archaeological sites.

Included in the literature review were the California Inventory of Historic Resources (California Office of Historic Preservation [OHP], 1976), the Office of Historic Preservation's Five Views: An Ethnic Sites Survey for California (OHP, 1988), California Historical Landmarks (OHP, 1990), California Points of Historical Interest (OHP, 1992), CRHR (OHP, 1998), and the Historic Properties Directory (HPD) (through

5 April 2012) (OHP, 2012). The HPD includes updated listings of the National Register of Historic Places (NRHP), the California Historical Landmarks, and the California Points of Historical Interest. Also consulted was the General Land Office Plat of San José Y Sur Chiquito; the map of Township 16 South, Range 1 West (US-GLO 1884, 1890); the United States Coast Survey of Monterey to the Carmel River and Southward (1876); and the 1913, 1941, 1947, and 1960 USGS Monterey, California, 15-minute topographic quadrangles.

The records search was conducted for sites within a 0.25-mile radius surrounding the APE and studies within or adjacent to the APE boundary. At least 43 cultural resources studies have been conducted in or adjacent to the APE and six resources recorded within the search radius.

The records indicated that approximately 50 percent of the APE has been previously surveyed. The remaining 50 percent is located within the Lagoon and Fourth Addition neighborhood between Carmelo Street and Mission Ranch. This portion of Carmel has been subject to numerous studies over the last half century – most occurring within the last two decades as the County has begun requiring residents of Carmel Point to conduct archaeological surveys prior to remodeling or construction projects in the area. In many cases, this has resulted in numerous small studies and monitoring reports per residence with only partial documentation filed at the NWIC. A summary of relevant surveys is presented below.

In 1930, Avery Wood surveyed portions of the Monterey coast and reported the location of shell mounds within and adjacent to the current proposed APE. In the early 1950s, Broadbent surveyed Carmel Point and the surrounding area including the Carmel Mission to document the extent of recorded sites within the housing development. She noted that Carmel Point was already built up and it was difficult to determine boundaries and depth.

In the 1980s, Breschini and Haversat conducted a survey of Mission Ranch. The survey did not note any prehistoric or mission-period artifacts or features, but noted the presence of historic structures. The following year they joined a group led by Greenwood to evaluate Mission Ranch. The survey located extensive refuse deposits, some over eight feet in depth. The study also noted several potentially eligible historic buildings and structures at the ranch. An evaluation of the buildings was conducted by Baer in 1984 that found Mission Ranch had sufficient integrity and local and regional significance to merit documentation to the Historic American Buildings Survey standard. In 1991, Breschini and Haversat completed a mitigation plan for Mission Ranch that reduced the recommendations made by Greenwood (1984) to archaeological monitoring during construction.

In 1991, Runnings and Breschini surveyed a parcel east of the current APE. This survey noted the presence of some abalone shell and darkened soil that did not constitute a resource; the authors recommended construction monitoring. A historical and architectural evaluation of a residence near the proposed project APE was performed by Leach and Magii in 2000. The evaluation found that the house was not eligible to the California Register.

A pedestrian survey of the APE was undertaken on August 5 and 6, 2015. The survey was conducted by walking all accessible portions of the APE. Transects ranged from 15 to 30 feet wide depending on terrain and vegetation. Duff and grass root mat were periodically removed to observe bare soil. Rodent burrow backdirt piles were also checked for potential evidence of buried or covered deposits. Most of the APE consists of the Lagoon and built environment where visibility was nonexistent or poor. Visibility was fair in the remainder of the APE on Carmel River State Beach and Mission Fields. A total of 20 acres (approximately 50 percent of the APE) was surveyed. The unsurveyed areas represent locations where access was difficult as a result of vegetation and water in the Lagoon, as well as areas where landscaping and built environment limited surface visibility and thereby prevented ground surveys.

CONSULTATION

The Native American Heritage Commission (NAHC) was contacted on November 20, 2015, and was requested to review the Sacred Lands file for information on Native American cultural resources in the APE. On December 11, 2015, a response from the NAHC was received, which stated that the record search did not indicate the presence of known Native American cultural resources. Additionally, a list was provided by the NAHC of Native American individuals and organizations who may have knowledge of potential cultural resources within the proposed project area. On December 15, 2015, letters and emails were sent to all individuals listed. A response was received from Louise Miranda Ramirez, Chairperson of the Ohlone/Costanoan-Esselen Nation (OCEN) on January 15, 2016. Ms. Ramirez expressed OCEN's interest and concerns regarding the proposed project and requested consultation.

Assembly Bill (AB) 52 established a formal consultation process for California tribes as part of the CEQA process and equates significant impacts on "tribal cultural resources" with significant environmental impacts (PRC Section 21084.2) (please also refer to **Section 4.4.2.2, State**, below for more information about AB 52). Although AB 52 became law on January 1, 2015, it only applies to projects that have a NOP or notice of Negative Declaration/Mitigated Negative Declaration filed on or after July 1, 2015. The NOP for the proposed project was filed July 14, 2014, and, therefore, AB 52 does not apply to the proposed project. However, as described above, the County and ASC have consulted with OCEN regarding the proposed project, beginning in February 2016 and most recently in September 2016, meeting the legislative intent that "tribal knowledge about land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources" and that CEQA analyses must consider tribal cultural resources, including "the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation."

RESOURCES WITHIN OR ADJACENT TO ARCHAEOLOGICAL AREA OF POTENTIAL EFFECTS

Seven resources have been recorded with 0.25-mile of the APE; two of these have been previously recorded within the APE. Of the resources recorded within the APE, one is a prehistoric habitation site (CA-MNT-17) and one is the Mission Ranch complex (CA-MNT-2087H). The Mission Ranch complex was recorded in 2002 by Doane et al. as a grouping of several historic-era houses and outbuildings that were converted into a resort in 1937. The site record references a previous survey that observed numerous dense refuse deposits on the property, some over eight feet deep. Doane noted that the site had been modified since 1984, but that new buildings and upkeep of older ones complement the existing characteristics. The prehistoric habitation site was first recorded in 1949, and is multicomponent, spanning almost all of the prehistoric occupation period of the Monterey Peninsula. Radiocarbon dating suggests it was occupied over at least the past 9,000 years and is one of the largest sites in Monterey County. Vast numbers of abalone shells present in cobblestone-like layers are thought to be a shellfish gathering and processing site. Shell beads, battered and abraded stones, bone artifacts, obsidian, chert, grinding slabs, pestles, and animal remains have been observed at the site. In addition, human remains have also been found. To avoid potential degradation of this site, the precise location of this resource is not being disclosed.

The remaining five resources are located within 0.25-mile of the APE and are prehistoric habitation sites. One of these sites, the Carmel Mission (CA-MNT-18/H), is listed on the HPD and is a National Register-listed property as well as a California Landmark. Another building, the Tor House, is on the HPD as a National Register- and California Register-listed property. The other three sites contain resources similar to those described above and their precise locations are also not being disclosed to avoid potential degradation.

4.4.1.7 Paleontological Resources

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, and diagnostically or stratigraphically important – and those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals not previously represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations – particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species (ICF, 2008).

Most of the fossils found in Monterey County are of marine forms that form record of the region's geologic history of advancing and retreating sea levels. Most of the County's fossils are micro-organisms such as foraminifera or diatoms, or assemblages of mollusks and barnacles most commonly found in sedimentary rocks ranging from Cretaceous age (138 to 96 million years old) to Pleistocene age (1.6 million to 11 thousand years old). The EIR prepared for Monterey County's General Plan reported a review of nearly 700 known fossil localities that was conducted by paleontologists in 2001, in which 12 fossil sites were identified as having outstanding scientific value. Generally, the fossils at these 12 sites reflect the type of assemblages found throughout the county (i.e., micro-organisms or invertebrates); however, each has special characteristics that make it unique or rare, or in some way provide important stratigraphic or historic information (ICF, 2008). The proposed project site is not located in the proximity to the general areas of important paleontological sites as depicted in the County's General Plan EIR.

The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources (SVP, 1995, 1996), which are followed by most practicing paleontologists in the United States, and in some cases, the SVP standards have been adopted by Federal, State, or local agencies. The SVP has helped define the value of paleontological resources and, in particular, indicates that a paleontological resource is considered to be 5,000 years before present or older and not to be confused with an archaeological resource. Vertebrate fossils and fossiliferous (fossil-containing) deposits are considered significant nonrenewable paleontological resources and are afforded protection by Federal, State, and local environmental laws and guidelines. Invertebrate fossils are not significant paleontological resources unless they are present within an assemblage of vertebrate fossils or they provide undiscovered information on the origin and character of the plant species, past climatic conditions, or the age of the rock unit itself.

The SVP has outlined criteria for screening the paleontological potential of rock units and established assessment and mitigation procedures tailored to such potential. **Table 4.4-1, Criteria for Determining Potential for Paleontological Resources**, lists the criteria for high-potential, undetermined, and low-potential rock units. **Section 4.5, Geology, Soils, and Seismicity**, describes the geologic units that the proposed project components would be constructed on or within. Using the paleontological potential criteria shown in **Table 4.4-1**, the geologic units at proposed project sites (i.e., coastal terrace deposits, coastal dunes, dune sand, floodplain deposits, and basin deposits) have a low potential for paleontological resources.

Table 4.4-1 Criteria for Determining Potential for Paleontological Resources

Paleontological Potential	Description
High	Geologic units from which vertebrate or significant invertebrate or plant fossils have been recovered in the past, or rock formations that would be lithologically and temporally suitable for the preservation of fossils. Only invertebrate fossils that provide new information on existing flora or fauna or on the age of a rock unit would be considered significant. Common examples are: • Most tertiary-age sedimentary rocks, especially fine-grained, low-energy deposits such as shale and mudstone. • Pleistocene-age alluvial fans, lake/playa deposits, shallow marine deposits, and marine terraces
Undetermined	Geologic units for which little or no information is available.
Low	Geologic units that are not known to have produced a substantial body of significant paleontological material, as demonstrated by paleontological literature and prior field surveys, and which are poorly represented in institutional collections. Common examples are: • All intrusive igneous rocks (e.g., granites) • Most metamorphic rocks and volcanic rocks (e.g., marble, slate, schist, basalt, etc.) • Sediment deposited within the last 10,000 years (e.g., Holocene alluvium, bay muds/estuarine areas, slope wash, or recent landslide deposits)
Source: SVP, 1995	

4.4.2 Regulatory Environment

4.4.2.1 Federal

NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act (NHPA), first adopted in 1966, has become the foundation and framework for historic preservation in the United States. The NHPA requires federal agencies to take into account the effects of their undertakings on historic properties; and makes the heads of all federal agencies responsible for the preservation of historic properties owned or controlled by their agencies. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. Undertakings include federally funded, licensed, or permitted projects.

The NHPA established the NRHP, the official record of historical resources. Districts, sites, buildings, structures, and objects are eligible for listing in the NRHP. Nominations are listed if they are significant in American history, architecture, archaeology, engineering, and culture. The NRHP is administered by the National Park Service (NPS). A property must have both historical significance and integrity to be eligible for listing in the NRHP. To be significant, a property must be "associated with an important historic context." The NRHP identifies four possible context types, of which at least one must be applicable to the property at the national, state, or local level. A property is considered significant if it meets the NRHP listing criteria, as stated below:

a. The property is associated with events that have made a significant contribution to the broad patterns of our history; or

b. The property is associated with the lives of persons significant in our past; or

c. The property embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or

d. The property has yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

A property can be eligible for listing in the NRHP under these criteria as being significant at a national, state, regional, or local level depending on the historic context in which it is being evaluated. For a property to qualify under one or more of these Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance." While a property's significance relates to its role within a specific historic context, its integrity refers to the "property's physical features and how they relate to its significance." To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for listing in the NRHP. However, such properties will be considered eligible if a property that achieved significance within the past 50 years is of exceptional importance.

Section 106 of the NHPA and its implementing regulations (36 CFR 800) require federal agencies, or those they fund or permit, to consider the effects of their actions on properties that may be eligible for listing or are listed in the NRHP. The Section 106 review process involves a four-step procedure, as outlined below:

1) Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.

2) Identify historic properties by determining the scope of efforts, identifying cultural resources, and evaluating their eligibility for inclusion in the NRHP.

3) Assess adverse effects by applying the criteria of adverse effect to historic properties (resources that are eligible for inclusion in the NRHP).

4) Resolve adverse effects by consulting with the State Historic Preservation Officer and other consulting agencies, including the Advisory Council on Historic Preservation if necessary, to develop an agreement that addresses the treatment of historic properties.

4.4.2.2 State

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR is "an authoritative listing and guide 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" (PRC Section 5024.1[a]). The CRHR includes buildings, sites, structures, objects, and districts significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. The CRHR is maintained by State Parks' OHP.

The criteria for eligibility to the CRHR are based on NRHP criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the CRHR, including California properties formally determined eligible for or listed in the NRHP. To be eligible for the CRHR, a prehistoric or historic-period resource must be significant at the local or State level under one or more of the following criteria:

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 the 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 (CEQA Guidelines Section 15064.5 [a][3]).

For a resource to be eligible for the CRHR, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. The seven aspects of integrity are: location, design, setting, materials, workmanship, feeling, and association. A resource that does not retain sufficient integrity to meet the NRHP criteria may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data (OHP, 2014).

California's list of special considerations is shorter than the criteria considerations for the NRHP listed above. It includes some allowances for moved buildings, structures, or objects, as well as requirements for proving the significance of resources that are less than 50 years old and discussion of the eligibility of reconstructed buildings. Additionally, unlike the criteria considerations for the NRHP, cemeteries do not come under the scrutiny of special considerations for the CRHR. In addition to separate evaluations for eligibility for the CRHR, the State automatically lists in the CRHR resources that are listed or formally determined eligible for the NRHP.

CALIFORNIA PUBLIC RESOURCES CODE

Several sections of the California PRC protect cultural resources located on public land. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor.

PRC Section 5097.98 states that if Native American human remains are identified within a project area, the landowner must work with the Native American Most Likely Descendant as identified by the NAHC to develop a plan for the treatment or disposition of the human remains and any items associated with Native American burials with appropriate dignity. These procedures are also addressed in Section 15064.5 of the State CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

CALIFORNIA HEALTH AND SAFETY CODE

California Health and Safety Code Section 7050.5 regulates the treatment of human remains. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to his or her authority. If the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires that public or private projects financed or approved by public agencies be assessed to determine the effects of on historical resources. CEQA uses the term "historical resources" to include buildings, sites, structures, objects, or districts that may have historical, pre-historical, architectural, archaeological, cultural, or scientific importance. A resource is considered historically significant under three circumstances:

1) If it is CRHR-listed or determined to be eligible for such listing by the State Historical Resources Commission;
2) If it is included in a local register of historical resources (unless the preponderance of evidence demonstrates that it is not historically or culturally significant); or
3) If it meets at least one of the criteria for listing on the CRHR (CCR Section 15064.5(a)).

Properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR and, therefore, represent significant historical resources for the purpose of CEQA (PRC Section 5024.1(d)(1)). CEQA further identifies that the fact that a resource is not listed in, or determined to be eligible for listing, in the California Register of Historic Resources (or local register) or identified in an historical resource survey does not preclude a lead agency from determining that the resource may be a historical resource as defined pursuant to PRC 5020.1(j) or 5024.1 (State CEQA Guidelines, CCR Section 15064.5(a)(3).

CEQA also provides further guidance regarding the treatment (and evaluation of impacts) of cultural and historic resources. Specifically, State CEQA Guidelines CCR Section 15064.5(b)(3) identifies that "projects that follow the Secretary of the Interior's Standards for the Treatment of Historic Property with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource." CEQA also requires the lead agency to identify feasible measures to mitigated significant adverse changes in the significance of a historical resource (State CEQA Guidelines, CCR Section 15064.5(b)(4)). CEQA further requires that if a project would affect a state-owned historical resource, and the lead agency is a state agency, the lead agency shall consult with the State Historic Preservation Officer as provided in PRC Section 5024.5.

Assembly Bill 52

In September of 2014, the California Legislature passed AB 52, which added provisions to the PRC concerning the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze a project's impacts on "tribal cultural resources" separately from archaeological resources (PRC Section 21074; 21083.09). The bill defines "tribal cultural resources" in a new section of the PRC,

Section 21074. AB 52 also requires lead agencies to engage in additional consultation procedures with the respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, 21082.3). Finally, AB 52 requires the Office of Planning and Research to update Appendix G of the CEQA Guidelines by July 1, 2016, to provide sample questions regarding impacts to tribal cultural resources (PRC Section 21083.9). AB 52's provisions only apply to projects that have a notice of preparation filed on or after July 1, 2015.

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. "Tribal cultural resources" are defined as either (1) "sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe" that are included in the state register of historical resources or a local register of historical resources, or that are determined to be eligible for inclusion in the state register; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the state register. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

4.4.2.3 Regional/Local

RELEVANT PLANNING DOCUMENTS

The 1982 Monterey County General Plan, Carmel Area Land Use Plan, Carmel Area Coastal Implementation Plan, Point Lobos State Reserve and Carmel River State Beach General Plan, CCA, and California PRC contain a variety of policies related to preservation and protection of historic buildings and cultural resources. Please refer to **Section 4.9, Land Use and Planning** for a description of these regulations and plans, and **Appendix C, Applicable Land Use Plans, Policies, and Regulations Consistency Analysis for the Carmel Lagoon Project** for a list of relevant policies and the consistency analysis.

4.4.3 Impacts and Mitigation

4.4.3.1 Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, the project would result in significant impacts related to cultural resources if it would:

a. cause a substantial adverse change in the significance of a historical resource as defined in CCR Section 15064.5;

b. cause a substantial adverse change in the significant of an archaeological resources pursuant to CCR Section 15064.5;

c. directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;

d. disturb any human remains, including those interred outside of formal cemeteries; or

e. cause a substantial adverse change to a tribal cultural resource, as defined in PRC Section 21074.

CEQA requires review of potential adverse impacts to defined historical resources (PRC Section 21084.1). The State CEQA Guidelines in CCR Section 15064.5(a) defines "historical resources" as any of the following:

1) Resources listed in or determined eligible by the State Historic Resources Commission for listing in the CRHR (State CEQA Guidelines, CCR Section 15064.5(a)(1)).

2) Resources included in a local register as defined in PRC Section 5020.1(k), or that are identified as significant in surveys that meet the standards provided in PRC Section 5024.1[g] (State CEQA Guidelines, CCR Section 15064.5(a)(3)) "unless the preponderance of evidence demonstrates" that the resource "is not historically or culturally significant." (State CEQA Guidelines, CCR Section 15064.5(a)(2)).

3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence. Generally, a resource shall be considered by the lead agency to be "historically significant" if it meets criteria for listing in the CRHR, including:

   a. Is associated with events that made a significant contribution to the broad patterns of California's history and cultural heritage.

   b. Is associated with the lives of people 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 (State CEQA Guidelines Section CCR 15064.5(a)(3)).

4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in an historical resource survey does not preclude a lead agency under CEQA from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1 (State CEQA Guidelines, CCR Section 15064.5(a)(4)).

State CEQA Guidelines in CCR Section 15064.5(b) defines a "substantial adverse change" to an historical resource 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." The significance of an historical resource is materially impaired when a project 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 CRHR or in registers meeting the definitions in PRC Section 5020.1(k) or 5024.1(g).

If it is determined that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 (of CEQA) and State CEQA Guidelines CCR Section 15064.5 apply. If an archaeological site does not meet the criteria for a historical resource contained in the State CEQA Guidelines, then the site may be treated as a "unique" archaeological resource in accordance with the provisions of PRC Section 21083.2(h), in which a unique archaeological resource is 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:

- Contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;

- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource is determined not to be a unique archaeological resource, the resource need not be given further consideration, other than the simple recording of its existence by the lead agency if it so elects (PRC Section 21083.2[h]). The State CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (14 CCR Section 15064.5[c][4]).

4.4.3.2 Impact Analysis Overview

APPROACH TO ANALYSIS

The APE for the proposed project was developed to identify all areas where construction-related ground disturbance could occur in order to evaluate the project's potential impacts on cultural resources. The APE was established based on input from the proposed project technical team, preliminary proposed project plans, and assessor parcel information (**Figure 4.4-1**). The APE for paleontological and archaeological resources includes all areas of ground disturbance, staging areas, access, and work areas.

AREAS OF NO IMPACT

Some of the significance criteria outlined above are not applicable to the proposed project or the proposed project would not result in impacts related to these criteria, as explained below.

(a) Cause a substantial adverse change in the significance of a historical resource as defined in [State CEQA Guidelines, CCR] *Section 15064.5.* (No impact during operation). Operation of the proposed EPB and SRPS project components would have no effect on historical resources, as no earth moving activity is required. Thus, the significance criterion (a) related to impacts to historical resources during operation is not applicable to the proposed project and is not discussed further.

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to [State CEQA Guidelines, CCR] Section 15064.5. (No impact during operation). Operation of the proposed EPB and SRPS project components would have no effect on archaeological resources, as no earth moving activity is required. Thus, the significance criterion (b) related to impacts to archaeological resources during operation is not applicable to the proposed project and is not discussed further.

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (No impact during construction or operation). There were no known paleontological resources or "unique geological features," such as rock outcroppings and bluff exposures identified at any of the proposed project sites. The proposed project sites are not identified within an area identified as containing paleontological resources nor is it located in close proximity to any known paleontological resources. In addition, the geologic units present at the project sites have a low potential for paleontological resources. Thus, the significance criterion (c) related to impacts to paleontological resources or unique geologic features during construction and operation is not applicable to the proposed project and is not discussed further.

(d) Disturb any human remains, including those interred outside of formal cemeteries. (No impact during operation). Operation of the proposed EPB and SRPS project components would not have the potential to disturb any human remains, as no earth moving activity is required. Thus, the significance criterion

(d) related to disturbance of human remains during operation is not applicable to the proposed project and is not discussed further.

(e) Cause a substantial adverse change to a tribal cultural resource, as defined in PRC Section 21074. (No impact during operation). Operation of the proposed EPB and SRPS project components would not have the potential to result in a substantial adverse change to a tribal cultural resource, as no earth moving activity is required during operations. Thus, the significance criterion (e) related to impacts to tribal cultural resources during operation is not applicable to the proposed project and is not discussed further.

4.4.3.3 Impacts and Mitigation Measures

Impact CR-1: <u>Construction Impacts on Historic Resources (Extant Buildings and Structures)</u>. Construction of the proposed EPB and SRPS project components and implementation of the proposed ISMP project component would not result in a substantial adverse change in the significance of known and/or unknown historic resources as defined in CCR Section 15064.5 of the State CEQA Guidelines or historic properties pursuant to 36 CFR 800.5. (Criterion a) (EPB: Less-than-Significant with Mitigation) (SRPS: Less-than-Significant) (ISMP: Less-than-Significant) (Project Overall: Less-than-Significant with Mitigation)

The Mission Ranch complex (CA-MNT-2087H/P) is located with the eastern portion of the APE for the proposed project, directly adjacent to the proposed EPB project component alignment. This resource is classified as a historic ranch complex that was converted into a resort in the late 1930s. The majority of this site is improved with developed areas and landscaping. The Mission Ranch has not been officially evaluated for listing on either the NRHP or the CRHR. There are also two historic-era resources, one of which is a multi-component site, located within 0.25-mile of the APE. One of these sites, the Carmel Mission (CA-MNT-18/H) is listed on the HPD and is a NRHP-listed property, as well as a California Landmark. Another building, the Tor House, is on the HPD as a NRHP- and CRHR-listed property.

Based on the results of the Archaeological Survey Report, there are no buildings or structures located within the APE that are listed in the CRHR or NRHP. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be "historical resources" for purposes of CEQA (PRC Section 5024.1 and CCR, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or a preponderance of evidence indicates that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR. Due to its classification as an historic ranch, this analysis assumes that the Mission Ranch complex may be a historical resource, and there is the potential that construction of the proposed EPB project component could potentially impact this potential historical resource, if determined eligible. Moreover, the construction of the proposed EPB project component could also result in the accidental discovery of a previously unknown historic resource associated with other resources within 0.25 mile of the APE (i.e., Carmel Mission, CA-MNT-18/H).

Direct effects would occur if project construction equipment and vehicles were to directly damage a historic resource by demolishing or materially altering the resource. The construction of the proposed EPB project component would encroach into the Mission Ranch property and, thus, temporarily impact the sheep pasture area of the site. Although construction activities on the Mission Ranch property

would not result in the demolition or alteration of an historic building or structure, historic materials might be encountered including stone or adobe footings or walls, buildings or other remains with cut nails, filled privies or wells, or deposits of metal, glass, and/or ceramic artifacts. In addition, excavation and grading activities associated with the construction of the proposed EPB project component may uncover previously unknown historic resources associated with other resources within 0.25 mile of the APE. As a result, there is the potential that construction-related activities associated with the proposed EPB project component could result in potential impacts to known and/or unknown historic resources, including buried historic resources. This is a potentially significant impact. Implementation of **Mitigation Measure CR-1 (Monitoring EPB Installation)**, which requires construction monitoring of the proposed EPB project component, would reduce this impact to a less-than-significant level.

The construction of the proposed SRPS project component and implementation of the proposed ISMP project component are not located near these two historic resources or other historic resources, and based on the results of the Archaeological Survey Report, it is unlikely that these proposed components would impact any unknown historic resources. Therefore, potential impacts to historic resources resulting from the construction of the proposed SRPS project component and implementation of the ISMP project component are less-than-significant.

Impact Conclusion

There is the potential that construction-related activities associated with the proposed EPB project component could result in potential impacts to known and/or unknown historic resources, including buried historic resources. This is a potentially significant impact. However, with implementation of **Mitigation Measure CR-1 (Monitoring of EPB Installation)**, this impact would be reduced to a less-than-significant level.

Mitigation Measure

Mitigation Measure CR-1: <u>Monitoring EPB Installation</u> (Applies to EPB project component). The construction of the EPB shall be monitored in accordance with the measures below:

- **Worker Educational Awareness Program (WEAP):** Prior to initiation of any construction-related activities, the County shall implement a WEAP that shall inform all project construction workers about the types of resources that could be encountered in connection with construction-related activities, describe applicable avoidance measures, and identify appropriate notification procedures in the event a previously unknown resource is identified during construction. This program would be developed in consultation with a qualified archaeologist and may be combined with other pre-construction educational programs and training, as described elsewhere in this EIR.

- **Accidental Discovery:** In the event a previously unknown historic resource is uncovered during the course of construction, all work would temporarily cease until such time as a qualified professional can evaluate the resource to determine whether the finding is significant. If the finding is a historical resource (including glass or ceramics sherds, old foundation stones, hand forged metal object, etc.), avoidance measures or appropriate mitigation will be implemented based on the recommendations of the qualified professional. Work would cease within a radius of 30 feet of the discovery and the resource protected in place until mitigation can be implemented. Work may continue in other parts of the proposed project site during the implementation of potential resource mitigation (if necessary). In the event of a discovery of a previously unknown resource, the County would

consult with a qualified professional to determine the appropriate method of mitigation prior to the resumption of ground-disturbing activities. The requirements of this measure would be reflected on all construction drawings and would be described as part of the WEAP.

- **Monitoring:** The County shall retain a qualified archaeological professional to monitor ground disturbing activities (i.e., grading, excavation, and trenching). The monitor shall be present to identify and recover any potentially significant historic materials that may be uncovered in connection with construction-related activities. If a resource is uncovered during construction, the monitoring shall follow the procedures described above regarding the accidental discovery of a previously unknown resource.

Impact CR-2: <u>Construction Impacts on Historical and/or Archaeological Resources</u>. The construction of the proposed EPB and SRPS project components and implementation of the proposed ISMP project component would not result in a substantial adverse change in the significance of known and unknown historical and/or archaeological resources, as defined in CCR Section 15064.5 of the State CEQA Guidelines. (Criteria a and b) (EPB: Less-than-Significant with Mitigation) (SRPS: Less-than-Significant with Mitigation) (ISMP: Less-than-Significant with Mitigation) (Project Overall: Less-than-Significant with Mitigation)

CEQA uses the term "historical resources" to include buildings, sites, structures, objects, or districts that may have historical, pre-historical, architectural, archaeological, cultural, or scientific importance. A resource is considered historically significant under three circumstances: (1) if it is CRHR-listed or determined to be eligible for such listing by the State Historical Resources Commission; (2) if it is included in a local register of historical resources (unless the preponderance of evidence demonstrates that it is not historically or culturally significant); or (3) if it meets at least one of the criteria for listing on the CRHR (CCR Section 15064.5(a)). CEQA further identifies that the fact that a resource is not listed in, or determined to be eligible for listing, in the CRHR (or local register) or identified in an historical resource survey does not preclude a lead agency from determining that the resource may be a historical resource as defined pursuant to PRC 5020.1(j) or 5024.1 (State CEQA Guidelines, CCR Section 15064.5(a)(4).

One archaeological resource site (CA-MNT-17) has been previously recorded within the APE. In addition, four archaeological sites resources have been recorded within 0.25-mile of the APE. To avoid potential degradation, the precise locations of these resources are not being disclosed. Based on the results of the Archaeological Survey Report, these sites have not been formally evaluated and are not listed in the CRHR or NRHP.

As described above, State CEQA Guidelines in CCR Section 15064.5(4) identifies that the fact that a resource is not listed in, or determined to be eligible for listing, does not preclude a lead agency from determining that the resource may be a historical resource. CA-MNT-17 has been identified within the APE. This buried site has been investigated several times by archaeologists and contains a large range of artifacts as well as human remains. The lead agency (the County) has determined that it constitutes a historical resource in accordance with the CEQA Guidelines Section 15064.5(a)(3). This site would be affected by construction activities associated with proposed SRPS and EPB project components,

although the exact nature of that effect will depend on the location and depth of CA-MNT-17 in relation to project plans. This is a potentially significant impact.

The presence of the recorded resources within and adjacent to the APE indicates that the proposed project vicinity was used intensively by Direct Ancestors of OCEN over a significant period of time. Subsurface archaeological deposits may be present within the APE. Prehistoric and historic-period resources may be obscured by dense vegetation, alluvial deposits, and built environment. Prehistoric materials might include obsidian and chert flaked tools (e.g., projectile points, knives, scraping implements) or flaked tool-making debris; culturally darkened soil containing shell and heat-altered rock; or stone milling equipment (mortars, pestles, handstones, or millingstones). Due to the high archaeological sensitivity of the proposed project site, the construction of the proposed EPB and SRPS project components has the potential to unearth buried or previously unknown archaeological resources. The potential inadvertent discovery of archaeological resources and potential inadvertent damage or disturbance during construction is a significant impact.

Due to the historic and continued disturbance associated with implementation of the ISMP project component, as well as the naturally dynamic beach and lagoon activities, there is a lower likelihood of encountering archaeological resources. No resources have been documented in the ISMP project component area, and none were identified in the report. However, due to the high archaeological sensitive of the area, the implementation of the ISMP project component has the potential to unearth buried or previously unknown archaeological resources. The potential inadvertent discovery of archaeological resources and potential inadvertent damage or disturbance during implementation of the ISMP project component is a significant impact. Implementation of **Mitigation Measures CR2-a** through **CR2-d** would reduce this impact to a less-than-significant level.

Impact Conclusion

Based on the above analysis, the construction of the proposed EPB and SRPS project components and implementation of the ISMP project component may result in potentially significant impacts to known and unknown historical and/or archaeological resources. This is a potentially significant impact. Implementation of **Mitigation Measure CR-2a (Final Grading Plans)**, **Mitigation Measure CR-2b (Archaeological Data Recovery)**, **Mitigation Measure CR-2c (Archaeological Monitoring),** and **Mitigation Measure CR-2d (Accidental Discovery of Archaeological Resources)** would reduce the impact to a less-than-significant level.

Mitigation Measures

Mitigation Measure CR-2a: Final Grading Plans. (Applies to EPB and SRPS project components). The final grading plans for the EPB and SRPS project components shall be prepared in consultation with an archaeologist who meets the Secretary of the Interior's Qualification Standards and a representative of the OCEN.

Mitigation Measure CR-2b: Archaeological Data Recovery. (Applies to EPB and SRPS project components). Archaeological data recovery consists of the systematic excavation, analysis, reporting, and curation of artifacts from an archaeological site. Prior to the commencement of any construction related activities, the County will retain an archaeological consultant who meets the Secretary of the Interior's Qualifications Standards. In consultation with the County and a representative of OCEN, the archaeologist shall design and carry out an Archaeological Testing Program to determine the relationship of archaeological deposits to the proposed construction. The archaeologist shall report on the results of the Program to the County in a draft and a final Archaeological Testing Report (ATR).

Based on the conclusions of the ATR, the archaeologist shall prepare a draft and final Archaeological Research Design and Treatment Plan (ARDTP) for the County to avoid and mitigate potential impacts to archaeological resources. The ARDTP will organize the various phases of archaeological work – identification, evaluation, and data recovery – into a single pre-approved plan covering the treatment of all on-site archaeological resources and help to avoid lengthy interruptions of construction activities. The plan will cover any additional archaeological research investigation standards, field excavation strategies, monitoring (including a provision requiring that an OCEN representative shall be present during archaeological fieldwork or that OCEN may choose the assigned Cultural Monitor), artifact handling and analysis procedures, treatment of human remains, and ownership and curation of materials. It is noted that OCEN has requested that curation of materials or remains be culturally determined by OCEN and ownership of non-burial material be granted to OCEN, and the plan will include these provisions. Requirements for final reporting of all field methods, results, and findings will also be specified. Finally, the plan will ensure that all Federal and State laws and regulations regarding the treatment of Native American cultural materials and Native American burials would be adhered to, including appropriate notification to the NAHC regarding findings of Native American artifacts. The ARDTP shall be developed with the coordination and concurrence of the County and OCEN, and in accordance with the Secretary of the Interior's standards and guidelines (36 CFR 800.9(c)(1)).

The archaeologist shall consult with the OCEN representative during the preparation of the ARDTP to ensure to the degree prudent and feasible, and bearing in mind project goals, that the proposed work is in keeping with OCEN traditions and sensibilities.

Once approved by the County, a data-recovery investigation and/or other treatment consistent with the ARDTP shall be conducted by the archaeologist. At the conclusion of the work, the archaeologist shall submit a draft and final Archaeological Data Recovery Report (ADRR) to the County that describes the archaeological and historical research methods employed in the data recovery program, and presents, analyzes, and interprets the recovered data. Once approved by the County, a copy of the ADRR shall be distributed to the relevant California Historical Resources Information System Information Center along with copies of all formal site record forms (DPR 523).

All artifacts determined in consultation between the archaeologist and OCEN representative to be neither burial related nor sacred could be curated together with copies of field notes and relevant reports in a suitable archaeological curation facility, preferably within Monterey County, if approved by OCEN and under agreement that all artifacts be returned to OCEN. The final disposition of non-burial related but sacred artifacts (if any) will be determined by the OCEN representative.

Mitigation Measure CR-2c: <u>Archaeological Monitoring</u>. (Applies to the proposed ISMP project component). A qualified archaeologist shall be on call to quickly assess any potentially significant cultural materials, archaeological resources, or human remains that might be uncovered during implementation of the ISMP project component. In addition, an OCEN monitor shall be on site during excavation activities. The qualified archeologist shall communicate and coordinate with the OCEN monitor in regard to all data collection and the evaluation of all Native American artifacts. Prior to the issuance of any grading permit, an on-call qualified archaeologist will be retained and the OCEN will be provided contact, access, and schedule information sufficient to facilitate their monitoring effort. If, at any time during earthwork, potentially significant cultural resources are encountered, work shall cease within 50

meters of the find until the archaeologist and an OCEN monitor can evaluate the discovery. If the find is determined by the archaeologist to be potentially eligible to the NRHP or CRHP, steps shall be taken to protect the find from damage or disruption. The State Historic Preservation Officer and the County will be notified. Additionally, an appropriate mitigation plan shall be developed by the archaeologist and implemented with the concurrence of the State Historic Preservation Officer, County, and, if the find is Native American, in consultation with an OCEN representative.

Mitigation Measure CR-2d: Accidental Discovery of Archaeological Resources. (Applies to ISMP project component). If archaeological resources are unexpectedly discovered during ISMP project component implementation, work shall be halted within 50 meters of the find until it can be evaluated by a qualified professional archaeologist and OCEN monitor. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented, with the concurrence of the lead agency (the County). If determined appropriate and necessary by the OCEN monitor, they shall selectively screen soil samples through 1/8" mesh to facilitate data recovery. All Native American-derived materials remaining in the screen shall be offered to the Chairperson of the OCEN.

Impact CR-3: Construction Impacts on Human Remains. The construction of the proposed EPB and SRPS project components and implementation of the ISMP may result in the disturbance of human remains. (Criterion d) (EPB: Less-than-Significant with Mitigation) (SRPS: Less-than-Significant with Mitigation) (ISMP: Less-than-Significant with Mitigation) (Project Overall: Less-than-Significant with Mitigation)

As described above, the presence of the recorded resources within and adjacent to the APE indicates that the proposed project vicinity was used intensively by Direct Ancestors of OCEN over a significant period of time. Human remains have been found within the recorded resource within the APE (CA-MNT-17) and there is a possibility that human remains may be encountered within the APE.

Due to the high archaeological sensitivity of the proposed project site, the construction of the proposed project has the potential to unearth and disturb human remains. The potential inadvertent discovery of human remains and potential inadvertent damage or disturbance during construction is a significant impact. This potentially significant impact can be reduced to a less-than-significant level with the implementation of **Mitigation Measure CR-3** and **Mitigation Measure CR-2b**.

Impact Conclusion

Based on the above analysis, the construction of the proposed EPB and SRPS project components and implementation of the ISMP project component may result in potentially significant impacts to human remains that may be uncovered during construction. This is a potentially significant impact. Implementation of **Mitigation Measure CR-3 (Discovery of Human Remains)** and **Mitigation Measure CR-2b (Archaeological Data Recovery)** would reduce the impact to a less-than-significant level.

Mitigation Measures

Mitigation Measure CR-3: Discovery of Human Remains. (Applies to all project components). If human remains are unexpectedly discovered during any construction, work shall be halted within 50 meters and the County Coroner shall be notified in accordance with provisions of PRC

Sections 5097.98-99. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four hours of the determination, as required by California Health and Safety Code Section 7050.5(c) and PRC 5097. The NAHC shall identify the person or persons it believes to be most likely descended (MLD) from the deceased Native American (PRC Section 5097.98). The County, MLD, and qualified archaeologist shall follow the measures identified in the ARDTP, required as part of **Mitigation Measure CR-2b**, for the respectful treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.59(d)). The measures identified in the ARDTP will take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects. All efforts will be made to leave the remains in place, if possible, as culturally determined by OCEN. The ARDTP will identify the reburial site(s) in the event that reburial is determined to be the appropriate disposition and treatment of human remains. The reburial site(s) will be determined in a location mutually agreed upon by the OCEN, the landowner, and the County, as appropriate, and shall be in a location not subject to further subsurface disturbance.

Impact CR-4: <u>Construction Impacts on Tribal Cultural Resources</u>. Construction of the proposed EPB and SRPS project components and implementation of the proposed ISMP project component would not result in a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074. (Criterion e) (EPB: Less-than-Significant with Mitigation) (SRPS: Less-than-Significant with Mitigation) (ISMP: Less-than-Significant with Mitigation) (Project Overall: Less-than-Significant with Mitigation)

AB 52 established a formal consultation process for California tribes as part of the CEQA process and equates significant impacts on "tribal cultural resources" with significant environmental impacts (new PRC Section 21084.2) (please also refer to **Section 4.4.2.2, State**, above for more information about AB 52). Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the CRHR or local register of historical resources (PRC Section 21074).

Although AB 52 became law on January 1, 2015, it only applies to projects that have a NOP or notice of Negative Declaration/Mitigated Negative Declaration filed on or after July 1, 2015. The NOP for the proposed project was filed July 14, 2014, and, therefore, AB 52 does not apply to the proposed project.

However, as described above in **Section 4.4.1.6, Cultural Resources in the Vicinity of the Proposed Project**, under subheading **Consultation**, the County and ASC have consulted with OCEN, meeting the legislative intent that "tribal knowledge about land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources" and that CEQA analyses must consider tribal cultural resources, including "the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation." In a letter received from Louise Miranda Ramirez, Chairperson of the OCEN on January 15, 2016, Ms. Ramirez expressed OCEN's interest and concerns regarding the proposed project and requested consultation. Ms. Ramirez also expressed that the "Carmel Lagoon and River are more than known sites, they are culturally important to our people, and will always be."

Based on the consultation with OCEN, the proposed project site (i.e., all three of the proposed SRPS, EPB, and ISMP project component sites) is considered one of OCEN's Ancestral Heritage Villages, an

OCEN Ancestral Heritage Site (OHAS), which is a tribal resource. As a result, impacts to the proposed project site would be potentially significant. Impacts to resources within the site (e.g, artifacts and human remains) are identified in **Impacts CR-1** through **CR-3** above, and mitigation measures have been identified to reduce these impacts to a less-than-significant level. In addition, impacts to the sensitive habitats within the proposed project site (e.g., including riparian, wetlands, seasonal emergent marsh, and/or other sensitive natural communities) were identified in **Impact BIO-2** in **Section 4.3, Biological Resources**. **Mitigation Measure BIO-2 (Avoid and Minimize Impacts to Federal and Coastal Wetlands, Other Waters of the U.S., Waters of the State, Riparian Habitat, and Seasonal Emergent Marsh)** requires avoidance and restoration of these sensitive habitats, which reduces impacts to the cultural landscape associated with the proposed project site to a less-than-significant level.

Impact Conclusion

Based on the above analysis, the construction of the proposed EPB and SRPS project components and implementation of the ISMP may result in potentially significant impacts to tribal cultural resources. This is a potentially significant impact. Implementation of **Mitigation Measure CR-1 (Monitoring of EPB Installation)**, **Mitigation Measure CR-2a (Final Grading Plans)**, **CR-2b (Archaeological Data Recovery)**, **Mitigation Measure CR-2c (Archaeological Monitoring), Mitigation Measure CR-2d (Accidental Discovery of Archaeological Resources), Mitigation Measure CR-3 (Discovery of Human Remains),** and **Mitigation Measure BIO-2 (Avoid and Minimize Impacts to Federal and Coastal Wetlands, Other Waters of the U.S., Waters of the State, Riparian Habitat, and Seasonal Emergent Marsh)** would reduce the impact to a less-than-significant level.

4.4.4 References

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