1. **INTRODUCTION**

The information contained in this report summarizes the information contained in the following four technical studies prepared for the MidPen Housing Cypress Point affordable housing project:

- Cultural Resource Evaluation of the Cypress Point Project in Half Moon Bay (ARM 2018a, Appendix A)
- Paleontological Review-MidPen Cypress Point Affordable Housing Community Project, San Mateo County, California (FirstCarbon Solutions 2017, Appendix B)
- Archaeological Testing Program for CA-SMA-431 at the Cypress Point Project in Moss Beach, County of San Mateo (ARM 2018b, Appendix C)
- Archaeological Treatment Plan for the Proposed Cypress Point Project, in Moss Beach, County Of San Mateo (ARM 2018c, Appendix D)

These appendices are not attached because they contain confidential maps and site records. They are available for review by qualified researchers at the California Historical Resources Information System (CHRIS) Northwest Information Center, California State University Sonoma.

2. **ENVIRONMENTAL SETTING**

2.1 **LOCATION OF THE PROPOSED PROJECT**

The subject area consists of approximately 10.88 acres of land near the corner of Carlos and Sierra streets in Moss Beach, County of San Mateo (see Figures 1 and 2). The elevation of the project site ranges from approximately 100 to 150 feet mean sea level. The nearest source of fresh water is Montara Denniston Creek, located approximately 300 feet north of the proposed project area.

2.2 **PROJECT DESCRIPTION**

The proposed project consists of the construction of 71 affordable housing units consisting of approximately 22 two-story buildings holding 2-4 units each. The project will also include the general office, the manager’s office, a community room, kitchen, computer room, laundry, and maintenance and storage areas. The project plan also includes several outdoor amenities, including: landscaping; a community garden; a children’s play area; an upper and a lower green; BBQ areas; and a public walking trail. Approximately one-half of the site will be developed, and the remainder will remain undeveloped.
Figure 1
Project Location
San Mateo County, CA

Base Map Source: ESRI, 2017
Map Date: 10/05/2017
Moss Beach

Project Vicinity
San Mateo County, CA

Aerial Source: NAIP (2016)
2.3 ETHNOGRAPHIC BACKGROUND

The Ohlone, or Costanoan, Indians inhabited the San Francisco Bay regions from the Golden Gate south to Monterey. Derived from a Spanish word, Costanoan means "people of the coast," and is an older term. Descendants of these people prefer to refer to themselves as "Ohlone," and it is now the generally accepted term. The research area is located in the Salson linguistic area, which shared many cultural traits with other linguistic groups in the Ohlone region. It is believed that the Ohlone Indians have inhabited the area since A.D. 500, and that speakers of the Hokan language previously inhabited at least part of the region. Archaeological data documents Native American coastal activity in the Central Coast area over the past 10,000 years, with some indications of occupation as early as 12,000 to 13,000 years ago (Jones et al. 2007).

The Ohlone were gatherers and hunters who utilized only the native flora and fauna with the exception of one domesticate, the dog. Yet, the abundance and high quality of natural resources allowed them to settle in semi-sedentary villages. The Ohlone were typically organized in basic political units called "tribelets" that consisted of 100 to 250 members. The "tribelet" was an autonomous social unit consisting of one or more permanent villages with smaller villages in a relatively close proximity (Kroeber 1962). Parties went out from the major villages to locations within the tribal territory to obtain various resources.

The proximity of both mountainous and waterfront regions in the local environment made a diversity of resources available during different seasons to the native inhabitants. During the winter months, the low-lying flats near the San Francisco Bay have abundant marine and waterfowl resources, while the surrounding mountainous areas are best in the summer months for their nut, seed, and mammalian resources (King and Hickman 1973). A primary food source was acorns, abundant in autumn and easily stored for the remainder of the year. According to Gifford, the acorn industry of California was probably the most characteristic feature of its domestic economy (Gifford 1951). An elaborate process of grinding and leaching acorns is necessary to render them palatable. The acorn industry first became a major source of food in the Middle Period as is indicated by the appearance of mortars and pestles in the archaeological record (King and Hickman 1973). Other important resources include various plant foods, land animals, and the marine resources of the San Francisco Bay and the ocean. Both large and small land mammals were typically hunted, trapped or poisoned. Many items, including shell beads and ornaments, were extensively traded with other groups as far away as the Great Basin of Nevada (Davis 1974).

More information regarding the ethnographic background of the project area is provided in Attachment A.
2.4  HISTORIC BACKGROUND

The proposed project area formerly made up a portion of the Point Montara Artillery Training Facility, a World War II era military complex in use between 1943 and 1945. Several structures within this complex were located within the current proposed project area, including barracks, offices, a mess hall, a library, a garage, a boiler room, an incinerator, a “TDD” hanger, and a drill field.

The Point Montara Artillery Training Facility was a top secret military installation operated by the U.S. Navy during World War II, containing 48 permanent structures, and housing over 1500 personnel. The facility was notable for its extensive use of Women Air Service Pilots (known as WASPs) who flew planes towing targets for the artillery firing from the coast along Point Montara. The facility also heavily utilized some of the earliest drone aircraft for target practice.

In the late 1960’s the proposed project area was in use as a training facility for firefighters. During this period, the structures within the proposed project area were razed by a controlled burn, leaving only exposed concrete foundations. The property has been vacant since 1970. The project area currently contains concrete foundations, as well as well as a fenced area containing Montara Water and Sanitary District infrastructure. Some structures and features associated with the military training facility remain standing outside the current proposed project area, along the coast of Point Montara west of SR 1.

Additional information about the history of the project site and the Point Montara Artillery Training Facility is provided in Attachment A.

2.5  PALEONTOLOGICAL SETTING

The proposed project lies within the Coastal Ranges Physiographic Province, specifically at the north end of the South Coastal Ranges.

3.  REGULATORY SETTING

3.1  NATIONAL REGISTER OF HISTORIC RESOURCES

The National Register of Historic Places was first established in 1966, with major revisions in 1976. The register is set forth in 36 CFR 60 which establishes the responsibilities of the State Historic Preservation Officers (SHPO), standards for their staffs and review boards, and describes the statewide survey and planning process for historic preservation. Within this regulation guidelines are set forth concerning the National Register of Historic Places (36 CFR 60.6). In addition, further regulations are found in 36 CFR 63-66 and 800, which define procedures for determination of eligibility, identification of historic properties, recovery, reporting, and protection procedures.

The National Register of Historic Places was established to recognize resources associated with the accomplishments of all peoples who have contributed to the country's history and heritage. Guidelines were designed for Federal and State agencies in nominating cultural resources to the
National Register. These guidelines are based upon integrity and significance of the resource. Integrity applies to specific items such as location, design, setting, materials, workmanship, feeling, and association. Quality of significance in American history, architecture, archaeology, engineering and culture is present in resources that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the following criteria:

a. Are associated with events that have made a significant contribution to broad patterns of our history;

b. Are associated with the lives of persons significant in our past;

c. Embody distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

d. Have yielded, or are likely to yield, information important in prehistory or history.

Ordinarily, properties that have achieved significance within the last 50 years are not considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria of the NRHP listed above, or if they fall within the following categories:

a. A religious property deriving primary significance from architectural significance or artistic distinction or historic importance; or

b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with an historic person or event; or

c. A birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his (or her) productive life; or

d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance.
3.2 **CALIFORNIA REGISTER OF HISTORIC RESOURCES**

A cultural resource is considered "significant" if it qualifies as eligible for listing in the California Register of Historic Resources (CRHR). Properties that are eligible for listing in the CRHR must meet one or more of the following criteria:

a. Association with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;

b. Association with the lives of persons important to local, California, or national history;

c. Embodying the distinctive characteristics of a type, period, region, or method of construction, or representing the work of a master, or possessing high artistic values; or

d. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The CRHR interprets the integrity of a cultural resource based upon its physical authenticity. An historic cultural resource must retain its historic character or appearance and thus be recognizable as an historic resource. Integrity is evaluated by examining the subject's location, design, setting, materials, workmanship, feeling, and association. If the subject has retained these qualities, it may be said to have integrity. It is possible that a cultural resource may not retain sufficient integrity to be listed in the National Register of Historic Places yet still be eligible for listing in the CRHR. If a cultural resource retains the potential to convey significant historical/scientific data, it may be said to retain sufficient integrity for potential listing in the CRHR.

3.3 **CALIFORNIA COASTAL ACT**

Article 5; Land Resources, Section 30244 of the California Coastal Act states that:

“Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.”

3.4 **CEQA**

3.4.1 **ARCHAEOLOGICAL AND HISTORIC RESOURCES**

The California Environmental Quality Act (CEQA) requires public or private projects financed or approved by public agencies to assess the impacts of the project on historical resources. Historical resources are defined as buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA requires that, if the project would result in an impact that may cause a substantial adverse change in the significance of a historical resource, alternative plans or measures to mitigate the impact must be considered; however, only significant historical resources need to be addressed. Therefore, the significance of cultural resources must be determined. The following steps are normally taken in a cultural resources investigation for CEQA compliance.
• Identify cultural resources.
• Evaluate the significance of the resources.
• Evaluate the impacts of the project on significant resources.
• Develop and implement measures to mitigate the impacts of the project on significant resources.

The State CEQA Guidelines define three ways that a property may qualify as a significant historical resource for the purposes of CEQA review.

• The resource is listed in or determined eligible for listing in the CRHR.
• The resource is included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC), or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
• The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15064.5[a]).

Each of these ways of qualifying as a significant historical resource for the purposes of CEQA is related to the eligibility criteria for inclusion in the CRHR, as described above.

In addition, California Health and Safety Code Section 7050.5, requires that if human remains are discovered during construction activities, no further disturbance shall occur until the following steps have been completed:

• The County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98.
• If the remains are determined by the County Coroner to be Native American, the Coroner shall notify the NAHC within 24 hours. The NAHC shall assign the Most Likely Descendant (MLD) for the remains at the site. The MLD shall have 48 hours to provide recommendations for treatment of the remains.

### 3.4.2 Paleontological Resources

CEQA provides protection for paleontological resources through environmental legislation. Direction regarding significant impacts on paleontological resources is found under Appendix G (part V) of the CEQA Guidelines. The Guidelines state, “A project will normally result in a significant impact on the environment if it will . . . disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study.” As stated in Section 5097.5 of the Public Resource Code, it is unlawful to remove paleontological remains without authorization, and violation of this provision can result in a misdemeanor. In addition, Section 622.5 of the California Penal Code sets the penalties for damage or removal of paleontological resources.
The CEQA Guidelines (Title 14, Section 15000, et seq. of the California Code of Regulations provide guidance for compliance with CEQA. Appendix G of the CEQA Guidelines provides a checklist of questions to be answered in environmental compliance documents. Question V.d. states “Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?”

3.4.3 TRIBAL CULTURAL RESOURCES UNDER ASSEMBLY BILL 52

California Assembly Bill 52 (AB 52), enacted July 1, 2015, expands CEQA by defining a new resource category, “tribal cultural resources.” Assembly Bill 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Sections 21074 (a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and that meet either of the following criteria:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

3.5 SAN MATEO COUNTY GENERAL PLAN POLICIES

The San Mateo County General Plan contains the following policy with regard to the protection of paleontological resources:

5.20. Site Survey

Determine if sites proposed for new development contain archaeological/paleontological resources. Prior to approval of a development for these sites, require that a mitigation plan, adequate to protect the resource and prepared by a qualified professional, be reviewed and implemented as a part of the project.
3.6 SAN MATEO COUNTY MIDCOAST LOCAL COASTAL PROGRAM

The MidCoast Local Coast Program is the vehicle by which the County of San Mateo assumes responsibility for implementing the California Coastal Act. In late 1980, the County Board of Supervisors and the California Coastal Commission approved the San Mateo County Local Coastal Program (LCP), and in April 1981, the County assumed responsibility for implementing the California Coastal Act in the unincorporated area of San Mateo County, including issuance of Coastal Development Permits. The LCP was last updated in 2013.

Four policies outlined within the Local Coastal Program have a bearing on cultural resources for the proposed project. These policies are discussed below.

1.25 Protection of Archaeological/Paleontological Resources

Based on County Archaeological/Paleontological Sensitivity Maps, determine whether or not sites proposed for new development are located within areas containing potential archaeological/paleontological resources. Prior to approval of development proposed in sensitive areas, require that a mitigation plan, adequate to protect the resource and prepared by a qualified archaeologist/paleontologist be submitted for review and approved and implemented as part of the project.

8.26 Structural Features

Employ the regulations of the Historical and Cultural Preservation Ordinance to protect any structure or site listed as an Official County or State Historic Landmark or is listed in the National Register of Historic Sites.

8.27 Natural Features

Prohibit the destruction or significant alteration of special natural features through implementation of Landform Policies and Vegetative Form Policies of the LCP.

10.24 Definition of Fragile Resources

Define fragile resource as (1) exposed rocky cliff faces, steep slopes as defined in the Hazard Component and hilly coastal terraces, (2) all sensitive habitats defined in the Sensitive Habitats component, and archaeological/paleontological resources.

a. Conduct studies by a qualified person agreed by the County and the applicant during the planning and design phases of facilities located within or near sensitive habitats and archaeological/paleontological resources to determine the least disruptive locations for improvements and the methods of construction. These studies should consider the appropriate intensity of use, improvement and management to protect the resources and reduce or mitigate impacts.

b. Provide improvements and management adequate to protect sensitive habitats. These may include, but are not limited to, the following: (1) informative displays, brochures, and signs to minimize public intrusion and impact, (2) organized tours of sensitive areas, (3) landscaped buffers or fences, and (4) staff to maintain improvements and manage the use of sensitive habitats.
4. **METHODOLOGY**

The methodology used in this investigation consisted of conducting archival research and surface reconnaissance surveys of the project site for archaeological and paleontological resources. In addition, prior to conducting the reconnaissance surveys, the County of San Mateo completed outreach to Native American Tribes. Detail regarding the methods used is presented below, and in more detail in Attachments A, B, C, and D.

4.1 **ARCHIVAL RESEARCH**

4.1.1 **ARCHAEOLOGICAL RESOURCES**

Prior to surface reconnaissance of the subject area, a study of the maps and records at the Northwest Information Center of the California Archaeological Site Inventory was conducted and given the file number NWIC# 17-0815. The archival research was conducted by transferring the study location to a state archaeological office that maintains all records of archaeological investigations in order to determine whether any archaeological sites or surveys have been recorded within a half mile of the project site. The purpose of this research was to determine if any known archaeological resources had previously been reported in or around the subject area.

**PREVIOUS STUDIES**

Four previous studies have been carried out within or adjacent to the proposed project area. These studies are described below:

**S-3082.** This study was carried out by S. Dietz and T. Jackson in 1970 and entitled “An Archaeological and Historical Reconnaissance of a Portion of the San Mateo County Coastside.” This was a broad survey with included the entirety of the current proposed project area within its scope.

**S-5389.** Carried out by M. Melandry in 1977, this study is entitled “Archaeological Survey Report on Excess Parcels 6695-01-01, 6696-01-01, 7091-01-091-02-01, on Route 1 in San Mateo County P.M. 35.5/35.8.” This study extends southwards from the southwest corner of the proposed project area.

**S-25083.** This study was carried out by J. Holson in 2002 and entitled “Archaeological Survey for Highway 1/ Montara, 8211.38 (PL 1004-07) (letter report).” Archival maps for this study indicate its location as a small circular area located within the eastern central portion of the proposed project area.

**S-31887.** Carried out by C. Busby in 2005, this study is entitled “Archaeological Assessment - Montara Water and Sanitary District EIR, Vicinity of Montara and Moss Beach and Within Half Moon Bay Airport, San Mateo County (letter report).” This study is located within the eastern central portion of the proposed project area.
A total of 26 additional previous studies have been carried out within a one quarter mile radius of the proposed project area. None of these studies identified any significant cultural resources within the project site.

**Previously Recorded Archaeological Sites**

No previously recorded archaeological sites are located within the project area. However, four previously recorded resources are located within one quarter mile of the proposed project area. These resources are briefly described below:

**CA-SMA-55.** This prehistoric site, originally designated Nelson 405, was a shell mound originally documented by Nels Nelson in 1908. Nelson documented and investigated numerous shell mounds along the Central California Coast in the early years of the 20th Century, many of which have been significantly damaged or completely destroyed.

**CA-SMA-171H.** This historic district was originally recorded by H. Casper in 1973 and is described as containing the Point Montara Artillery Training Station and the Point Montara Light Station. None of the recorded elements are located within the proposed project area.

**P-41-2108.** This historic structure was recorded by D. Painter and C. Losee in 2003. It is described as the Montara Cottage.

**P-41-2154.** This historic resource was recorded in 2005 by D. Edwards. It is described as the Montara Water and Sanitary District Office at Point Montara Training Station.

None of these sites is located on the project site, and the proposed project would neither directly nor indirectly adversely impact any of these sites.

**4.1.2 Paleontological Resources**

On September 13, 2017, a paleontological records search was requested from the University of California Museum of Paleontology (UCMP), where paleontological site records are maintained. The records search included the examination of current geologic maps and paleontological locality maps to determine if any paleontological resources have been recovered within and around the project site, and to establish a foundation for gauging the sensitivity of the project site for additional and buried paleontological resources.

In addition, published reports concerning pertinent geologic and paleontological topics were investigated, which revealed no paleontological resources on the project site. The geologic mappings of Brabb et al. (1988) and of Pampeyan (1994) show the Project to lie on the Pleistocene marine terrace deposits and Cretaceous granitic rocks.

The UCMP reported that the project site contains Pleistocene marine terrace deposits underlain by Cretaceous granitic rocks. The granitic rocks will not produce paleontological resources, but Pleistocene terrace deposits have produced them. The database also reported records for nine localities in unnamed late Pleistocene deposits in San Mateo County, with the closest being a
Bison specimen located approximately 3 miles south of the project site. The existence of Bison in the marine terrace deposits demonstrates that the fauna is from the Rancholabrean North American Land Mammal Age.

The County of San Mateo Planning Department was contacted to obtain copies of sensitivity maps for archaeological and paleontological resources, as required by Local Coastal Program Policy 1.25. However, the County did not have copies of these maps.

4.2 NATIVE AMERICAN CONSULTATION

No Native American tribes have registered with San Mateo County under AB 52. Nevertheless, on December 21, 2017, the County of San Mateo Planning and Building Department sent letters to the following tribes notifying them of the proposed project requesting information regarding any Native American prehistoric resources in the area (Appendix E):

- Amah Mutsun Tribal band of Mission San Juan Bautista
- Costanoan Rumsen Carmel Tribe
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Ohlone Indian Tribe

No responses have been received to any of these letters.

Later, as part of the archaeological testing program (see below under Section 4.3 Surface Reconnaissance), Ms. Irene Zwierlein was contacted as a representative of the Amah Mutsun Tribal Band. Ms. Zwierlein provided a Native American monitor for the archaeological testing within CA-SMA-431 (see Surface Reconnaissance below for more information about this site). This monitor was present during hand excavation within the deposit.

4.3 SURFACE RECONNAISSANCE

4.3.1 ARCHAEOLOGICAL RESOURCES

INITIAL INVESTIGATION

The surface reconnaissance survey, conducted by a field archaeologist who examines exposed soils for cultural material, was done to determine if traces of historic or prehistoric materials exist within the study area. The archaeologist looked for early ceramics, Native American cooking debris, and artifacts of stone, bone, and shell. For historic cultural resources, the field evaluation also searched for older structures, distinctive architecture, and subsurface historic trash deposits of potentially significant antiquity.

A "general surface reconnaissance" was conducted by a field archaeologist on all open land surfaces in the subject area in October 2017. A "controlled intuitive reconnaissance" was performed in places where burrowing animals, exposed banks and inclines, and other activities had revealed subsurface stratigraphy and soil contents. The majority of the proposed project
area was accessible, however some areas were blocked by dense vegetation and steep slopes. Soil visibility was fair to poor; the majority of the surface area was obscured by vegetation. However, sporadic soil exposures provided an understanding of soil characteristics. In addition, portions of the surface were obscured by imported or disturbed soils, particularly in those areas modified for mountain bike recreational activities. Where visible, native soils consisted of a tan sandy loam and clay. Rock types noted included native siltstone gravel as well as imported gravel. Foundations, as well as other concrete features (culverts, other infrastructure) dating from World War II era military activities on the site were noted.

A small area of prehistoric shell midden was noted during surface reconnaissance. The midden was sparse, and surface elements consisted of a scatter of Mytilus (Mussel) shell fragments. The soil itself was light brown in color, potentially indicating an older deposit, largely leached of organic materials. This midden soil was observed alongside an informal footpath northwest of the existing water tanks on the property. This site was given the trinomial designation CA-SMA-431.

FURTHER TESTING OF CA-SMA-431

The process of archaeological research conducted for the Cypress Point project was aimed at answering a number of questions regarding the prehistoric use of the study area and in producing an accurate model of the sensitivity and deposition of cultural resources within the project area. Trenching and hand excavation were completed within the project area to determine the nature, extent, and significance of any possible prehistoric resources within the archaeological deposit, and to produce a chronology, determined by a radiocarbon sample obtained from the excavation.

As the original site boundaries were determined through surface observation, one research goal was to more systematically define the boundaries of the site. Mechanical testing trenches were excavated around the outside of the known area of the deposit in order to determine if a subsurface deposit extended beyond the site’s visible surface boundaries. Another goal was to more precisely determine the depth of the site and the nature of the contents. For this, hand excavation of two testing units was undertaken. An understanding of these characteristics of the site was needed to allow an analysis of the uniqueness of the site, as well as a determination of site’s significance under the criteria for the CRHR and the NRHP. Further detail regarding the methods used is provided below.

Field Methods

The first phase of the fieldwork involved mechanical test trenching. The test trenching was carried out on February 21, 2018. During trenching, seven mechanically excavated test trenches were placed outside the visible boundaries of the archaeological site in order to determine if subsurface elements of the site extended beyond those boundaries. The trenches were used to help identify the presence or absence of subsurface cultural resources. During trenching, the following information was recorded: soil type, color, and rock type. None of the mechanically excavated trenches contained any cultural materials.
The second phase of the fieldwork involved hand excavation of two 1 x 1 meter test units. Excavation of the test units was carried out on February 22, 2018. Placement of the units was determined based upon the defined boundaries of the archaeological deposit. Hand excavation was conducted using standard archaeological techniques with flat-nosed shovels, round-nosed shovels, picks, and trowels at arbitrary levels and dry screened through 1/4 inch mesh. All identified artifactual material was collected from each level.

Collected material was curated in level bags and each level recorded as to artifacts present, soil type, color, stratigraphy, and features present. All artifactual material from this process was then placed within its appropriate level bag from the field screening process. Hand excavation of the test units was carried out to a depth of 40 cm at which point sterile soil was encountered. A hand auger boring was then conducted to a depth of 100 cm in each unit.

**Laboratory Methods**

In the laboratory, all materials were washed and cataloged. All artifacts were washed in cool water and allowed to dry. Then, each item was examined, weighed, categorized, and entered into an artifact database. Categories used included shells, fire cracked rock (FCR), metal, and glass. All cultural materials were catalogued and weighed; shell materials were catalogued, weighed, and speciated. In addition, two shell samples were submitted to Beta Analytic, Inc. for radiocarbon dating analysis to provide a general chronology for the site.

**Results**

No cultural materials were observed in soils outside the recorded boundaries of the archaeological site. Attachment A contains more information regarding the results of the trenching conducted at the project site.

The hand excavation yielded both prehistoric dietary shell remains and recent historic materials. These data were then synthesized to produce an interpretation of deposition and a chronology of the test area. A summary of the findings is presented below. More detail regarding the findings is provided in Attachment A.

**Hand Excavation Unit #1**

The soil of Unit #1 consisted of a medium brown silty loam to a depth of approximately 27 cm, at which point a reddish brown silty clay was encountered to a depth of 40 cm. The surface level of this unit contained mussel (Mytilus) and barnacle (Balanus) shell fragments, as well as terrestrial snail shell. The 0-20 cm level included mussel (Mytilus) and barnacle (Balanus) shell fragments, FCR, as well as historic materials including glass and plastic fragments, and a wire nail. The 20-40 cm level contained mussel (Mytilus) and barnacle (Balanus) shell fragments as well as one brown bottle glass fragment. This material was almost entirely concentrated in the upper 7 cm of the level; the reddish silty clay from 27-40 cm appeared sterile. A hand auger boring was conducted at the base of the 20-40 cm level, to a depth of 100 cm. Soils in this auger boring consisted of a reddish brown silty clay gradually shifting to an orange clay and sand. No cultural materials were noted in the auger boring.
Hand Excavation Unit #2

The soil of Unit #2 consisted of a medium brown silty loam to a depth of approximately 40cm, at which point a reddish brown silty clay was encountered. The surface level of this unit contained mussel (Mytilus) and barnacle (Balanus) shell fragments. The 0-20 cm level included mussel (Mytilus), barnacle (Balanus), turban shell, and chiton (Cryptochiton) shell fragments, terrestrial snail shell, and FCR, as well as historic materials including one fragment of clear glass. The 20-40 cm level contained mussel (Mytilus) and barnacle (Balanus) shell fragments as well as terrestrial snail shell. Dense reddish brown silty clay was encountered at approximately 40 cm. A hand auger boring was conducted at the base of the 20-40 cm level, to a depth of 100 cm. Soils in this auger boring consisted of a reddish brown silty clay gradually shifting to an orange clay and sand. No cultural materials were noted in the auger boring.

Summary of Faunal Shell Finds

Shell remains comprised a majority of the cultural material in both the hand excavated units. The shell recovered was comprised of multiple species. Recovered shell included mussel (Mytilus), which was the most abundant species, as well as smaller amounts of barnacle (Balanus) shell, Turban shell (Turbinidae), and chiton (Cryptochiton). The Ohlone used these species as a food resource.

Fire-Cracked Rock

Fire-cracked rock (FCR) is often used as a surface indicator of a prehistoric archaeological deposit. Prehistoric inhabitants of the region often used rock in their cooking activities. Heated rocks were placed in baskets in order to boil water and cook foods. Rocks were also used in the construction of hearths, and may have become firecracked from repeated fire burning. Although rocks may be affected by fires which burn naturally across the land, rocks which are fire-cracked and heavily damaged appear to have been repeatedly exposed to high temperature fires and rapid cooling, potentially related to human activity. Fire-cracked rock is characterized by sharp foliations and cracks in the surface that contrasts with the worn natural exterior of the rock. There is often a pinkish discoloration on the cracked surface.

Historic Artifacts

Small amounts of historic material were encountered in both hand excavated units. These historic artifacts were mixed with the prehistoric deposit and may be the result of previous construction activities or rodent burrowing at this location. Historic materials including glass and metal were noted down to 40 centimeters in both units, indicating that the deposit had been disturbed. In general, the historic artifacts recovered appear to date from the mid- to late-20th Century to the present.
**Radiocarbon Dating**

The most reliable of the absolute dating techniques available to archaeologists involves the analysis of carbon 14 (C14), an unstable isotope of carbon. This dating technique relies on three characteristics of C14:

- All living things contain a set percentage of C14 in their bodies while they are alive;
- C14 has a characteristic half-life (the time needed for half the original number of unstable atoms to change to stable ones) of 5,730 years.
- Although the levels of C14 atoms in the environment have fluctuated through geological time, scientists have been able to document these changes using ice cores, dendrochronology, and other cross checks.

After the fieldwork was completed, two samples were selected and submitted to Beta Analytic Laboratories, Inc., in Miami, Florida. Sample #1 was taken from the 0-20cm level of Unit #1. Sample #2 was taken from the 20-40cm level of Unit #2. Sample #1 was given a conventional radiocarbon age of 1000 +/- 30 BP (Before Present) and a calendar calibration date of 1501 to 1683 Cal AD (449-267 Cal BP). Sample #2 was given a conventional radiocarbon age of 1520 +/- 30 BP, and a calendar calibration date of 1068 to 1276 Cal AD (882-674 Cal BP).

Occupation of Central California is divided into three periods:

- Early Period (3000 to 500 Before the Common Era (BCE));
- Middle Period (500 BCE to 900 of the Common Era (CE))
- Late Period (900 CE to 1700 CE).

The carbon date suggests that the site was occupied during the Late Period.

**4.3.2 Paleontological Resources**

No surface reconnaissance surveys were conducted for paleontological resources.

**4.4 Significance Criteria**

**4.4.1 Cultural Resources**

As set forth in Appendix G, Question V of the State CEQA Guidelines, the following criteria have been established to quantify the level of significance of an adverse effect to historical and cultural resources evaluated pursuant to CEQA. An impact would exceed an impact threshold if it would:

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

As established by AB 52 and set forth in Appendix G, Question XVII of the State CEQA Guidelines, the following criteria have been established to quantify the level of significance of an adverse effect to tribal cultural resources evaluated pursuant to CEQA. An impact would exceed an impact threshold under these circumstances:

If the project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.  IMPACTS AND MITIGATION MEASURES

5.1  ARCHAEOLOGICAL AND HISTORIC RESOURCES

Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? Less than significant Impact.

The project site contains the concrete foundations of structures from the Point Montara Anti-Aircraft Training Center, which operated during WWII. The structures themselves were destroyed during subsequent use of the site for the training of fire personnel. None of the structures within the proposed project area are currently listed on the County, State, or National Registers as historic resources.

These remnants do not appear to adequately convey the character of the original structures or the activities that took place during this period, and are not eligible for listing in the NRHP or the CRHR. The project site also contains Montara Water and Sanitary District infrastructure including tanks, culverts, and other fixtures. However, these structures are utilitarian in character and do not appear historically significant, and in any case, would not be affected by the proposed project. Therefore, this impact would be less than significant, and no mitigation is required.
Impact CUL-2: *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? Less than significant with Mitigation Incorporated.*

The archaeological deposit at CA-SMA-431 is contained within a small, well-defined area (approximately 80 feet by 30 feet in size). Based upon the surface dimensions and depth of the deposit (approximately 40 cm or 1 foot), as observed during this testing program, it is estimated that the entire deposit contains approximately 90 cubic yards of soil.

The deposit is identifiable as Native American in origin due to multiple factors, including:

- The presence of dietary shell not generally consumed during the historic period in this area (such as barnacles, turban shells, and chiton).
- The very weathered and fragmentary nature of the shells
- The presence of fire cracked rock (FCR), which is characteristic of Native American food preparation activities in this area of California.

Radiocarbon analysis of two shell samples returned calibrated dates of 1501 to 1683 AD and 1068 to 1276 Cal AD. However, historic artifacts in the form of materials such as glass, plastic, and metal were present at all levels of the deposit, which indicates that the deposit has been heavily disturbed.

The property as a whole was extensively developed by the military during WWII, and the archaeological deposit at CA-SMA-431 is located within a small terrace a short distance from a large concrete foundation, which is a remnant of this era. Hummocks of soil material spread throughout the larger subject property also indicate that more recent importations of soil have taken place. Earthmoving activities by the Montara Water and Sanitary District within the proposed project area have occurred, but were largely restricted to pipeline construction (Martinez 2018).

The proposed project area has frequently been used as a dumping site for a variety of materials, including garbage, rocks, and spoils dirt (Oswein 2018). The presence of relatively modern plastic fragments within the deposit indicate disturbance after military ownership of the property, either during its use as a firefighter training facility in the 1960’s, or as a result of more recent dumping activities. Thus the historic patterns of grading and construction on this property point to the possibility that the deposit itself was imported from a nearby archaeological site, such as CA-SMA-55, located on Point Montara approximately 150 feet from the northwest corner of the proposed project boundaries. Alternatively, the deposit may represent the heavily disturbed basal layer of a deeper site removed during historic earthmoving on the property. Thus the deposit may contain isolated intact features.

Based upon the results of the archaeological testing and historic background study, as documented in *Archaeological Treatment Plan For The Proposed Cypress Point Project In Moss Beach, County Of San Mateo* (Attachment D), the project area as a whole should be considered sensitive for both prehistoric and historic archaeological materials. The proposed project, as currently designed, calls for construction of three structures (labeled B4 on the proposed site
plan) within and in the immediate vicinity of the identified boundaries of the CA-SMA-431 deposit. Thus excavation and grading for these structures will necessitate the removal of the majority or all of the archaeological deposit. Preservation in place was determined not to be feasible as the proposed project could not feasibly be modified to avoid the deposit. Relocating these structures is not feasible in light of the project objectives because the project was designed to: a) be feasible from a construction standpoint by avoiding significant slopes that cover portions of the site, b) be consistent with the character of the surrounding neighborhood in the design and location of buildings; c) minimize aesthetics impacts on neighboring properties; and d) preserve portions of the project site as undeveloped. These objectives require limiting development on portions of the site. On the other hand, removing these structures from the proposed project would negatively impact the key project objective of providing a significant number of affordable housing units in the MidCoast region.

Thus, this is considered a significant impact. To reduce the impact of the proposed project to a less-than-significant level, implement mitigation measures CUL-1, CUL-2, and CUL-3.

**Mitigation Measure CUL-1: Additional Site Excavation**

An archaeological salvage program, consisting of four hand excavated 1x1 meter mitigation units, will take place prior to the commencement of construction earthmoving activities. Placement of the units will be based on available archival background data, field observations, and proposed project plans. Hand excavation will be conducted using standard archaeological techniques with trowels, picks, and shovels at arbitrary levels and dry screened through ⅛ inch mesh. All identified artifactual material will be collected from each level. Collected material will be placed in level bags and each level will be recorded using level forms. Artifacts, soil type, color and stratigraphy, and features present will be recorded. All artifactual material from this process will then be placed within its appropriate level bag during the field process.

**Mitigation Measure CUL-2: Archaeological Monitoring**

Considering that cultural resources frequently exist below the surface, their location is often not visible. Field archaeologists therefore monitor earthmoving activities to observe whether artifactual remains, soil changes indicating cultural use, and/or other indicators of human activity are present within a project area. Monitoring consists of a qualified archaeological field technician present and observing ground-disturbing activities in native soil.

Archaeological monitoring will be conducted during all earthmoving activities involved with the project in accordance with the schedule coordinated between the general contractor and project Archaeologist. This will consist of full time monitoring during all earth moving activities within 50 feet of CA-SMA-341. Archaeological spot check monitoring, consisting of periodic monitoring of the project site during ground disturbing activities, including during demolition of the existing concrete foundations, will take place for the remainder of the project. The timing and frequency of these spot checks will be determined throughout the course of earthmoving activities for the
proposed project based upon the construction schedule and the nature of any cultural materials encountered. The archeologist will inspect the site per the approved schedule and will subsequently provide an archaeological monitoring report. This report will document all cultural materials encountered, and will be submitted to project representatives within 40 working days of the completion of earth moving activities for the project.

**Mitigation Measure CUL-3: Unanticipated Findings during Construction**

If any individual artifacts (prehistoric or historic), features, potential midden soils, or other indicators of cultural use are noted by the archaeological monitor during the course of earthmoving activities, work within 50 feet of the find will be stopped until appropriate measures are formulated by the Project Archaeologist and accepted by the County and the project representative. If the project archaeologist is not present on the site, the County, Owner and Project Archaeologist shall be notified by telephone and the project archaeologist will examine the materials encountered within 24 hours. Any archaeological materials found at the site will be collected and stored for further analysis.

In the event of the discovery of an intact archaeological deposit during the course of archaeological mitigation/monitoring, construction activities shall be halted within 50 feet of the find for the purpose of identifying and mapping the deposit, and further mitigation recommendations will be formulated by the Project Archaeologist and discussed with the project representative. If these materials are determined to be significant, a preservation plan or recovery program will be prepared, submitted to San Mateo County for approval, then implemented.

For any cultural materials discovered, preservation in place is the preferred treatment of an archæological resource (CEQA Section 21083.2(b); CEQA Guidelines Section 15126.4(b)(3)(a)). If preservation in place of an archæological resource is not feasible, data recovery, in accord with the approved data recovery plan will be implemented, prior to any further soil disturbance within 50 feet of the discovered materials (or other appropriate boundary approved by the Project Archaeologist and the County) (CEQA Guidelines Section 15126.4(b)(3)(C)). The recovery plan shall include controlled excavation of the entirety, or a representative sample, of the cultural materials, analysis of the recovered material, and written documentation. The data recovery program shall specify the methods to be used for curation of scientifically significant data in an appropriate curation facility that is compliant with the OHP’s Guidelines for the Curation of Archaeological Collections (1993).

Scientific analysis will be performed on the resources recovered from the archaeological monitoring for this project, following basic laboratory operations. Any artifacts and archaeological features found during construction shall be removed, cleaned, stabilized/conserved, and catalogued in accordance with professional curation and archaeological practice. Native American burials, if discovered, will be analyzed in
accordance with recommendations from the MLD designated by the NAHC and Mitigation Measure CUL-4.

Recovered materials will be documented in a written report prepared by the Project Archaeologist. The report and recovered material will be submitted to the Owner for storage, curation, or onsite interpretive display. The final report shall be produced documenting and synthesizing all data collected from the above-mentioned measures. The report will include recording and analysis of materials recovered, conclusions, and any additional recommendations. Copies of the archaeological report prepared in conjunction with this project will be filed with the California Historical Resources File System, Northwest Information Center (CHRIS/NWIC) at Sonoma State University, as well as with the County of San Mateo.

With implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3, the potential impacts to site CA-SMA-341 would be reduced to less than significant, because the site will excavated to obtain all available data about the site and all cultural materials will be preserved, because ground-disturbing activities will be monitored, and methods are provided to protect an unanticipated cultural materials discovered during project construction.

**Impact CUL-3:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less than significant with Mitigation Incorporated.**

The sources consulted indicate that the Pleistocene marine terrace deposits, which are underlain by Cretaceous granitic rocks, have a high sensitivity for significant paleontological resources. Therefore, earthmoving of previously undisturbed sediments during construction of the proposed project could have a significant impact on paleontological resources. This would be a significant impact. To reduce this impact to a less-than-significant level, implement Mitigation Measure CUL-4.

**Mitigation Measure CUL-4: Pedestrian Paleontological Surveys**

Prior to initiating any earth-moving activities associated with the proposed project, the project proponent shall retain the services of a paleontologist with the qualifications listed by the Society of Vertebrate Paleontology (SVP 2010).

The paleontologist shall be provided with construction plans and design a paleontological resource monitoring plan to be approved by the County of San Mateo. This plan will address monitoring of all disturbance of previously undisturbed sediments during demolition and construction, sediment sampling and testing, specimen preparation, identification, reporting, and curation. Once the plan has been approved, the paleontologist shall execute a pedestrian survey of the project footprint for paleontological resources and geologic indicators pertinent to these resources. Should any resources be discovered, the paleontologist will follow the procedures in the plan.

With implementation of Mitigation Measure CUL-4, the potential impact on paleontological resources will be reduced to less than significant, because pre-construction paleontological
surveys will evaluate the likely for any resources to be on the project site, and procedures in the paleontological resource monitoring plan will protect any resources identified during project construction.

**Impact CUL-4:** *Disturb any human remains, including those interred outside of formal cemeteries?* **Less than significant with Mitigation Incorporated.**

Although no evidence of human remains on the project site has been found, it is possible that earth-moving activities associated with construction of the proposed project would reveal previously unidentified remains. This impact would be significant. To reduce it to a less-than-significant level, implement Mitigation Measure CUL-5.

**Mitigation Measure CUL-5: Procedures for Discovery and Treatment of Human Remains**

If human remains are found during excavation or construction, work will be halted at a minimum of 50 feet from the find, the area will be staked off, and the Owner, the County of San Mateo, and Project Archaeologist will be notified. The owner shall contact the San Mateo County Coroner, and no further excavation or disturbance of the site or any nearby area reasonably suspected to overlies adjacent human remains until the coroner determines that no investigation of the cause of death is required.

If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours of this determination. The Native American Heritage Commission (NAHC) shall identify the person or persons it believes to be the Most Likely Descendent (MLD) of the deceased Native American. The MLD may then make recommendations to the Owner and execute an agreement for the means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods, as provided in Public Resources Code Section 5097.98.

If required, reinterment of human remains will be performed according to California law for Native American burials (Chapter 1492, Statutes of 1982). The intent of the California state law is to protect Native American burials, isolated and disarticulated human remains, and associated cultural materials found during the course of an undertaking. It also serves to insure proper analysis prior to their final disposition. The location and procedures of this undertaking will be recorded by the project archaeologist. Reinterment will take place with all due speed upon completion of all necessary analysis. This information will be included in the final report prepared by the Project Archaeologist, or if necessary, as an addendum to the report.

The Owner shall rebury the Native American human remains and associated grave goods with the appropriate dignity on the property in a location not subject to further disturbance if:

a. The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission.
b. The descendent identified by the NAHC fails to make a recommendation for burial and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the Owner.

Any associated grave goods and soil samples from the burial site will be analyzed per the agreement between the Owner and the MLD. Dependent upon the nature of this agreement, diagnostic artifacts such as projectile points, shell beads and ground stone artifacts may be studied and illustrated in the final report to be prepared by the Project Archaeologist. Radiocarbon dating and obsidian hydration and sourcing may be undertaken in order to provide a chronology for newly identified features.

With implementation of Mitigation Measure CUL-5, any human remains and grave goods discovered during construction of the proposed project will be protected, treated with due respect, and preserved or reinterred according to state law and the wishes of the MLD.

5.2 **Tribal Cultural Resources**

**Impact TCR-1:** *Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the CRHR or in a local register of historic resources, as defined in Public Resources Code Section 5020.1(k)?* **Less than significant Impact.**

No Tribal Cultural Resources were identified on or near the project site either in any of the cultural resource reports prepared for the proposed project, through the AB 52 consultation process, or through subsequent outreach by the County of San Mateo to Native American tribes. Therefore, the proposed project would not impact any known Tribal Cultural Resources. This impact is less than significant, and no mitigation is required.

**Impact TCR-2:** *Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public resources Code Section 5024.1?* **Less than significant Impact.**

No Tribal Cultural Resources have been identified on or near the project site by the County of San Mateo. Therefore, the proposed project would not impact any known Tribal Cultural Resources. This impact is less than significant, and no mitigation is required.
6. REFERENCES


