3.5 CULTURAL RESOURCES

Cultural resources represent and document the activities, accomplishments, and traditions of past and present cultures and link current and former inhabitants of an area. Archaeological resources include areas where prehistoric or historic activity measurably altered the earth, and include physical remains (e.g., arrowheads, bottles, or dietary refuse), environmental indicators such as pollen or other plant remains, and the soils or sediments in which they are deposited. Architectural resources include standing buildings, districts, bridges, and other structures of historic or aesthetic significance. The Avila Ranch Development Project (Project) is located in an area which has been used and inhabited during multiple eras by Native American, Spanish, Mexican, and American people. Because of the occurrence of historic structures and archeological remains from multiple periods of occupation within the Project vicinity, this EIR provides background information on these prehistoric and historic periods.

3.5.1 LUCE Update EIR

The 2014 Land Use and Circulation Elements Update EIR (LUCE Update EIR) previously analyzed cultural resource impacts as it pertains to the adoption and implementation of the 2014 Land Use and Circulation Element (LUCE) policies and programs. The LUCE Update EIR identified significant impacts to cultural resources due to the potential for unknown cultural resources to be disturbed; however, the EIR concluded that implementation of the existing General Plan policies would reduce impacts to a less than significant level with the incorporation of Conservation and Open Space (COS) Element Policy 3.3.3, Historical Documentation; and, COS Policy 3.5.6, Qualified Archaeologist Present; to mitigate potential impacts (City of San Luis Obispo 2014). This section identifies and evaluates issues related to cultural resources including archeological, and historic built environment for the Project. The information in this section is provided by the Cultural Resources Inventory and Evaluation for the Avila Ranch Development Project and subsequent memoranda (Appendix K) and the 2014 LUCE Update EIR. Adverse effects, impacts, and identified mitigation related to cultural resources are described below.

3.5.2 Environmental Setting

The following summary of the cultural setting describes the prehistory and history of the regional vicinity.

3.5.2.1 Prehistoric Setting

Archaeological evidence demonstrates that Native American groups (including the Chumash) have occupied the Central Coast for at least 10,000 years. While it is clear that there are many

differences between the Chumash groups living north and south of Point Conception, there are some broad patterns of cultural change applicable to both regions. The Northern (Obispeño) Chumash occupied much of San Luis Obispo County from the Santa Maria River north to approximately Point Estero. Chumash prehistory is divided into six periods:

- Paleo-Indian (pre-8000 B.C. [11000–8500 B.P.])
- Early Holocene (8000–3500 B.C. [8500–5500 B.P.])
- Early (3500–600 B.C. [5500–3000 B.P.])
- Middle (600 B.C.-A.D. 1000 [3000–1000 B.P.])
- Middle/Late Transition (A.D. 1000–1250 [1000–700 B.P.])
- Late (A.D. 1250–1769 [700 B.P.–Historic])

These periods are characterized below.

Paleo-Indian Period

The Paleo-Indian Period represents the earliest human occupations in the Central Coast region, which began prior to 10,000 years ago. Paleo-Indian sites throughout North America are known by the representative fluted projectile points, crescents, large bifaces used as tools as well as flake cores, and a distinctive assemblage of small flake tools. In the Project vicinity, however, this representative Paleo-Indian assemblage has not been discovered and is not believed to be present (Schinsing et al. 2015).



The Phase 2 cultural investigations of the Project site produced 13 ground stone artifacts and one unknown stone artifact (above), among other items. The identified ground stone tools indicate food processing was a major activity and represents evidence indicative of the site use during the Early Holocene period.

Early Holocene Period

More conclusive evidence of human occupation has been found at sites along the Central Coast dating to the early Holocene, between 8000 and 5000 B.C. The most common artifacts in these assemblages are the eponymous milling slabs and handstones used to grind hard seeds and process other foodstuffs. Obsidian from several of these components originated on the east side of the Sierra Nevada, suggesting that long-distance trade networks were also established during this era (Schinsing et al. 2015).

Early Period

Technological changes marking the transition into the Early Period (3500–600 B.C.) include an abundance of contracting-stemmed, Rossi square-stemmed, large side-notched, and other large projectile points. Site occupants of the Central Coast appear more settled with more limited mobility, and they increasingly used sites for resource procurement activities such as hunting, fishing, and plant material processing (Schinsing et al. 2015).

Middle Period

The Middle Period (600 B.C–A.D. 1000) is defined by the continued specialization in resource exploitation and increased technological complexity. The use of mortars and pestles increased. Additionally, expansion of trade is evident in the increased quantity of obsidian, beads, and sea otter bone. Circular shell fishhooks, which facilitated an increase in exploitation of fishes, appeared for the first time (Schinsing et al. 2015).

Middle Late Transition

The Middle-Late Transitional Period (A.D. 1000–1250) represents a rapid change in artifact assemblage as well as social and settlement organization. At the same time, some evidence points to population decline and interregional trade collapse. Obsidian is not found in sites dating to this period. Marine resources appear to have been largely dropped from the diet and instead people relied more on terrestrial resources such as small mammals and acorns (Schinsing et al. 2015).

Late Period

Populations on the Central Coast expanded in the Late Period (A.D. 1250–1769). Moreover, the absence of imported obsidian after A.D. 1000 suggests a change in trade relationships that is likely associated with the shift in settlement patterns. Changes during the period are attributed to a number of factors, including demographics, increased use of the bow and arrow, European diseases, severe droughts, and/or the emergence of powerful leaders (Schinsing et al. 2015).

3.5.2.2 Historical Setting

The first Europeans the Chumash encountered were Spanish explorers in the sixteenth century. In 1587, Pedro de Unamuno landed his ship in Morro Bay and penetrated inland to what is now known as the City of San Luis Obispo (City). At first the native people they encountered were extremely timid, but later the Spanish were attacked by the natives who killed two explorers and wounded several others.

Following the arrival of the first Europeans, Mission San Luis Obispo de Tolosa was founded in 1772 by Padre Junipero Serra. The native people at the mission suffered and the population declined rapidly. In 1803, there was a peak of 919 Native Americans residing at the mission, but by 1838 the population had declined to 170. In 1822 California became a Mexican Territory, and the mission lands gradually became private ranchos via Mexican land grants. Soon after, in 1846, the Bear Flag Rebellion occurred which resulted in California's independence from Mexico and control of the territory soon fell into the hands of the United States.

Beginning in 1873, the County experienced a steady change in land use and recorded more acreage under cultivation each year. The California State Board of Agriculture reported that in 1910 the County had 1,566,660 acres of farmland. Over the following decades, the San Luis Obispo area continued to operate as agricultural and ranching property.

Along with agriculture, the oil industry became prominent in the region with significant infrastructure constructed near the Project site. In 1910, Union Oil of California (Unocal of today) constructed the tank farm in San Luis Obispo to store crude oil from the San Joaquin Valley and Santa Maria fields. This tank farm was located northwest of the Project site, and was considered well removed from the community of San Luis Obispo at the time of construction. In 1926, a lightning strike at the facility caused a massive fire resulting in the burning and release of an estimated six million barrels of oil. The impacts of this disaster were far reaching and are still visible at the Project site today in the form of tar balls, which were recovered during the Phase 2 testing (Schinsing et al. 2015).

3.5.2.3 Project Site Historic Context

The parcels comprising the Project site were purchased in 1910 by Manual F. Avila. He originally purchased eight parcels totaling 240 acres from Stanford University. These parcels are collectively known as the Avila Santa Fe Ranch. The ranch has been farmed by three generations of the Avila family, and today is leased out for agricultural use. Peas, safflower, and various other crops are cultivated on the property (Schinsing et al. 2015).

3.5.2.4 Documented Cultural Resources

Previously Documented Archaeological and Historical Resources

The City maintains a Master Inventory of Historic Structures, a Contributing Properties List, and has designated several historic districts. The Master Inventory includes properties judged significant on their own individual merit, while Contributing Properties may not be individually significant but contribute to the historic character of the neighborhood or district. Prior to the Phase

I survey conducted by Applied Earthworks, Inc. for the Project, no archaeological or historical sites had been recorded within the Project site, though several were identified nearby. There have been 14 previous archeological investigations completed within a 0.25-mile radius of the Project site; of these, 6 studies have covered portions of the Project site. Although 6 studies included portions of the Project site, no previous investigations confirm the presence of archaeological and historical resources on the Project site.

Findings from the prior reports indicate three cultural resources have been identified within 0.25 mile from the Project site. These previously identified resources are described below and listed in Table 3.5-1.

- 1. In 1988, following archaeological survey for the KSBY-TV Estate Project, Robert O. Gibson recorded CA-SLO-1365 as a prehistoric milling location in a Franciscan rock outcrop. The site includes two bedrock mortars.
- 2. In 1989, Charles Dills recorded CA-SLO-1002H, the Pereira Octagon Barn, as a "barn of unusual construction." The unique eight-sided structure was erected in 1906 and used for more than half a century as a dairy during an important time in the modernization of dairy practices in the area. The site was recommended eligible to the National Register of Historic Places (NRHP) in 2013 under Criteria A and C, and was formally listed on the NRHP in January 2014 (Schinsing et al. 2015).
- 3. In 2006, Environmental Science Associates (ESA) recorded CA-SLO-2617H at the San Luis Obispo Tank Farm. Subsequent studies have updated the site record, recorded and excavated additional features, and documented the property and its historic context.

Table 3.5-1. Cultural Resources Recorded Within 0.25 Mile of the Project Site

Resource Number	Date Recorded	Recorder(s)	Description	
CA-SLO-1002H	1989	C. Dills	Pereira Octagon Barn	
CA-SLO-1365	1988	R. Gibson	Prehistoric milling location with two bedrock mortars on a Franciscan chert outcrop	
CA-SLO-2617H	2006	ESA	Historic oil tank farm with over 70 historic and prehistoric features	

Source: Schinsing et al. 2015; see Appendix K.

The results of the prior investigations suggest that a variety of archaeological resources may be present in the Project site. Such findings have the potential to yield information important in prehistory and history. Historical research suggests that there is a low likelihood that human remains would be uncovered during ground disturbing activities within the Project site (Schinsing et al. 2015).

Onsite Archeological and Historical Resources

On July 15, 2015 during a Phase 1 survey, Applied EarthWorks documented CA-SLO-2798/H within the southwestern region of the Project site. This site contains both prehistoric and historic archaeological deposits including a low-frequency, primarily surface scatter of milling equipment and flaked stone tools and an older related structure and domestic debris scatter. Phase 2 testing provided additional data needed to assess the significance and integrity of the site. Phase 2 testing at CA-SLO-2798/H included 24 shovel test probes, 2 test excavation units, and 4 surface transect units. The prehistoric artifact assemblage consists of 238 pieces of lithic debitage, 4 flake tools, two bifaces, three cores, two pieces of fire altered rock, nine manos, one basin metate, two stone bowl rims, and one enigmatic ground stone artifact (Schinsing et al. 2015).

The prehistoric component is indicative of an Early Holocene Millingstone occupation. The historic period component yielded 1,799 items concentrated around the former structure along the central eastern margin of the site. Historic materials consist primarily of domestic, personal, and structural artifacts representing agricultural activities associated with the historically recorded barn and agricultural complex at the site. The period of historic site occupation is from the 1920s to the early 1960s.



P-40-038310, a 16 to 17-foot wide octagonal silo footing, was identified within the Buckley Road Extension site.

In addition, the Phase 1 survey documented one historic feature (P-40-038310) within the Buckley Road Extension site of the Project, within the proposed route for the Buckley Road extension to South Higuera Street. The historic site is an octagonal foundation that once supported a grain silo. The structure is made of large aggregate concrete and shaped with wooden form and measures 16 to 17 feet across and approximately 24 inches in height. Although the date of construction and dismantling are unknown, octagonal silos were

popular in the early 1900s. This feature is located approximately 500 feet south-southeast of the previously identified historic Pereira Octagon Barn (CA-SLO-1002H). It is unknown when construction of this feature took place, or if it is directly associated with CA-SLO-1002H; however, due to the unusual shape and use of large aggregate within the concrete, it is likely the feature dates to the early nineteenth century.

Table 3.5-2. Cultural Resources Recorded Within Project Site

Historic Feature/ Resource Number	Date Recorded	Recorder(s)	Description	
P-40-038310	2015	M. Linder	Octagonal Silo Foundation	
CA-SLO-2798/H	2015	S. Schinsing	Includes both a prehistoric tool and debris scatter and a historic-period debris scatter	

Source: Schinsing et al. 2015; see Appendix K.

3.5.3 Regulatory Setting

3.5.3.1 Federal

No federal action is required for the Project; however, related federal regulation and guidelines are provided for background.

National Register of Historic Places (NRHP)

The NRHP was established by the National Historic Preservation Act (NHPA) of 1966 to help identify and protect properties that are significant cultural resources at the national, state, and/or local levels. Four criteria have been established to determine if a resource is significant to American history, architecture, archaeology, engineering, or culture and should be listed in the NRHP. These criteria include:

- a. It is associated with events that have made a significant contribution to the broad patterns of our history;
- b. It is associated with the lives of persons significant in our past;
- c. It embodies the distinctive characteristics of a 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; and
- d. It yields, or may be likely to yield, information important in prehistory or history.

Districts, sites, buildings, structures, and objects of potential significance that are at least 50 years in age must meet one or more of the above criteria to be eligible for listing in the NRHP.

3.5.3.2 State

Assembly Bill 52

Assembly Bill 52 amended Public Resources Code (PRC) Section 5097.94 (CEQA) and added eight new sections to the PRC relating to Native Americans. It was passed and signed into law in 2014 and took effect on July 1, 2015. This law establishes a new category of resource called tribal cultural resources (PRC Section 21074) and establishes a process for consulting with Native

American tribes and groups regarding those resources. The consultation process must be completed before a CEQA document can be certified. Native American tribes to be included in the process are identified through consultation with the California Native American Heritage Commission (NAHC) (PRC Section 21080.3.1).

Tribal cultural resources are "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe..." (PRC Section 21074.1). A tribal cultural resource must be on, or eligible for, the California Register of Historical Resources (CRHR) as described above for historical resources, or must be included in a local register of historical resources. Also as discussed above for historical resources, the lead agency can determine that a tribal cultural resource is significant even if it has not been evaluated as eligible for the CRHR or is not on a local register.

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).

Senate Bill 18

Passed in 2004, Senate Bill 18 requires cities and counties to consult with Native American tribes to help protect traditional tribal cultural places through the land use planning process. Unlike Assembly Bill 52, Senate Bill 18 is not an amendment to, or otherwise associated with, CEQA. Instead, Senate Bill 18 requires cities and counties to consult with Native American tribes early during broad land use planning efforts on both public and private lands, prior to site- and project-specific land use decisions. The bill applies to general plan adoption or amendments and to specific plan adoption or amendments.

A Native American tribe is defined as "a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission" (Governor's Office of Planning and Research 2005:6). Traditional tribal cultural places are defined in PRC Sections 5097.9 and 5097.993 to include sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines, or any historic, cultural, or sacred site that is listed on or eligible for the CRHR including any historic or prehistoric ruins, burial grounds, or archaeological site (Governor's Office of Planning and Research 2005:4).

Under Senate Bill 18, cities and counties must notify the appropriate Native American tribe(s) of intended adoption or amendments to general plans or specific plans, and offer the opportunity for the tribe(s) to consult regarding traditional tribal cultural places within the proposed plan area. Consultation is intended to encourage preservation and protection of traditional tribal cultural places by developing treatment and management plans that might include incorporating the cultural places into designated open spaces (Governor's Office of Planning and Research 2005:15).

Codes Governing Human Remains

The disposition of human remains is governed by Section 7050.5 of the California HSC and PRC Sections 5097.94 and 5097.98, and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

California Register of Historical Resources (CRHR)

PRC Section 5024.1 states that a resource may be eligible for inclusion in the CRHR if it:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- 2. Is associated with the lives of persons important in our past;
- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
- 4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC Section 5024.1(d)(1)).

3.5.3.3 Local

City of San Luis Obispo Cultural Heritage Committee (CHC)

The City's CHC is a seven-member advisory body for the City responsible for overseeing a wide range of educational and technical assistance programs focused on preserving historical and cultural resources. The purpose of the CHC is to "promote the preservation of architectural,

archaeological, historical and cultural resources in San Luis Obispo" (Advisory Body Handbook 2015:39).

City of San Luis Obispo Archaeological Resource Preservation Program Guidelines

Developed by the City's CHC, the Archaeological Resource Preservation Program Guidelines (part of the City's Environmental Guidelines) regulate the identification, evaluation, and treatment of archaeological sites and Native American cultural landscapes within the City. They are used to help develop the information needed to evaluate a project's effects on archaeological sites and artifacts, and thus achieve compliance with the cultural resource provisions of CEQA. The Guidelines call for a three-step approach to historical resources: preparation of an Archaeological Resource Inventory (ARI); Subsurface Archaeological Resource Evaluation (SARE); and Archaeological Resource Impact Mitigation (ARIM).

City of San Luis Obispo General Plan

General Plan, Conservation and Open Space Element

Proposed projects are also evaluated for consistency with the City's following adopted goals and policies relating to cultural resources. The COS Element of the General Plan addresses Historic and Architectural Resources with multiple goals and policies. The goals and policies discussed below focus on those relevant to cultural resources present on the Project site. For example, due to the lack of standing historic structures, goals and policies from the City of San Luis Obispo Historical Preservation Program Guidelines and other related policies are not included. Relevant goals and polices include:

Goal COS 3.2 Historic and Architectural Resources. The City will expand community understanding, appreciation, and support for historic and architectural resource preservation to ensure long-term protection of cultural resources.

Policy COS 3.3.1 Historic Preservation. Significant historic and architectural resources should be identified, preserved, and rehabilitated.

Policy COS 3.3.3 Historical Documentation. Buildings and other cultural features that are not historically significant but which have historical or architectural value should be preserved or relocated where feasible. Where preservation or relocation is not feasible, the resources shall be documented and the information retained in a secure but publicly accessible location. An acknowledgement of the resources should be incorporated within the site through historic signage and the reuse or display of historic material and artifacts.

Goal COS 3.4 Historic and Architectural Resources. The City will expand community understanding, appreciation, and support for archaeological resource preservation.

Policy COS 3.5.1 Archaeological Resource Protection. The City shall provide for the protection of both known and potential archaeological resources. To avoid significant damage to important archaeological sites, all available measures, including purchase of the property in fee or easement, shall be explored at the time of a development proposal. Where such measures are not feasible and development would adversely affect identified archaeological or paleontological resources, mitigation shall be required pursuant to the Archaeological Resource Preservation Program Guidelines.

Policy COS 3.5.2 Native American Sites. All Native American cultural and archaeological sites shall be protected as open space wherever possible.

Policy COS 3.5.4 Archaeological Sensitive Areas. Development within an archaeologically sensitive area shall require a preliminary site survey by a qualified archaeologist knowledgeable in Native American cultures, prior to a determination of the potential environmental impacts of the project.

Policy COS 3.5.5 Archaeological Resources Present. Where a preliminary site survey finds substantial archaeological resources, before permitting construction, the City shall require a mitigation plan to protect the resources. Possible mitigation measures include: presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation removal and curation in an appropriate facility under the direction of a qualified professional.

Policy COS 3.5.6. Qualified Archaeologist Present. Where substantial archaeological resources are discovered during construction or grading activities, all such activities in the immediate area of the find shall cease until a qualified archaeologist knowledgeable in Native American cultures can determine the significance of the resource and recommend alternative mitigation measures.

Policy COS 3.5.7 Native American Participant. Native American participation shall be included in the City's Guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considered updates or significant changes to its General Plan.

Policy COS 3.5.8 Protection of Native American Cultural Sites. The City will ensure the protection of archaeological sites that may be culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance; sites that may have religious value, even though no artifacts are present; and sites that contain artifacts which may have intrinsic value, even though their archaeological context has been disturbed.

Airport Area Specific Plan

Goal 3.1.9 Archeological and Historical Resources. Protect archaeological and historic resources.

Policy 3.2.22 Archeological and Historic Resources. Treat archaeological and historic resources consistent with the Community Heritage policies of the General Plan.

Program 3.3.16 Historical Resources. The City will work with the County Historical Society, landowners, and others to provide appropriate access opportunities and interpretive information to further understanding of historical resources, such as the oil tank remnants. Mitigation from the Chevron EIR that requires access and installation of interpretive signs shall be implemented in beginning phases of any development projects.

3.5.4 Environmental Impact Analysis

3.5.4.1 Thresholds of Significance

A project will have a significant effect on the environment if it will cause a substantial adverse change in the characteristics of a cultural resource that convey its historical significance or justify its eligibility for inclusion in the CRHR or a local register. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (CEQA Guidelines, Section 15064.5(b)).

Direct impacts are assessed by identifying the types and locations of proposed development, determining the exact locations of cultural resources within the Project site, and assessing the significance of the resources that may be affected. For archaeological sites, impact assessment is based on a comparison of known resource locations with the placement of ground disturbing Project activities that have the potential to remove, relocate, damage, or destroy the physical evidence of past cultural activities. If such ground disturbance overlaps with recorded site locations, then a direct impact may occur. Indirect impacts primarily result from the effects of Project-induced population growth. Due to their nature, indirect impacts are much harder to assess and quantify.

3.5.4.2 Impact Assessment Methodology

The analysis within this section builds upon the conclusions identified in the 2014 LUCE Update EIR. The LUCE Update EIR analyzed the potential to damage or disturb unknown and known cultural resources within the Project vicinity, including the Project site, and concluded that impacts would be less than significant with the incorporation of mitigation; this includes documentation of a historical resource (consistent with Policy COS 3.3.3) and the presence of an archaeological monitor (consistent with Policies COS 3.5.5 and 3.5.6).

An Applicant-prepared Cultural Resources Inventory and Evaluation Report was completed by Applied Earthworks, Inc. in October 2015 (Schinsing et al. 2015; Appendix K). The cultural resources study was then peer reviewed by a cultural resources specialist and Registered Professional Archaeologist (RPA), Jason Cooper, at Amec Foster Wheeler. As part of the Cultural Resources Inventory and Evaluation, on June 22, 2015, a records search was obtained from the Central Coast Information Center (CCIC) of the California Historical Resources Information System (CHRIS) at the University of California, Santa Barbara. Data sources also included the Historic Property Data File, the NRHP, the CRHR, the listing of California Historical Landmarks, the California Inventory of Historic Resources, and the California Points of Historical Interest. Cultural resources and reports within a 0.25-mile radius of the Project site were reviewed to identify previously documented archeological resources. Following completion of the Cultural Resources Inventory and Evaluation Report in 2015, Applied Earthworks, Inc. produced subsequent memoranda in June and July 2016 that expand on the recommended measures included within the report; these are also provided in Appendix K.

Following completion of the records search, Applied EarthWorks, Inc. initiated an intensive pedestrian Phase 1 field survey of the subject parcels in July 2015. During the Phase 1 survey, Applied EarthWorks, Inc. identified archaeological site CA-SLO-2798/H on the southeastern portion of Project site and historic feature P-40-038310 (octagonal silo foundation) in the Buckley Road Extension site. In August and September 2015 Applied EarthWorks, Inc. completed Phase 2 investigations to define the surface and subsurface extent of CA-SLO-2798/H, reveal site stratigraphy, search for subsurface features, and provide additional data needed to assess the significance and integrity of the site. A representative of the yak tityu tityu yak tilhini—Northern Chumash Tribe was on site to observe fieldwork. As described in the Cultural Resources Inventory and Evaluation Report (Schinsing et al. 2015), there is no evidence that either the prehistoric or historic component of CA-SLO-2798/H is associated with a specific event, person, or group important to local or California prehistory or history. The site does not embody distinctive

characteristics of a type or method of construction, nor does it have unique aesthetic qualities. Therefore, CA-SLO-2798/H does not appear significant under CRHR Criteria 1, 2, or 3.

Moreover, due to the limited quantity and variety of artifacts and debris and lack of clear historic associations, the historic assemblage from CA-SLO-2798/H lacks potential to provide meaningful data on questions regarding local or regional history. Therefore, the historic deposit of CA-SLO-2798/H does not appear significant under CRHR Criterion 4.

However, the prehistoric component in CA-SLO-2798/H possesses a robust ground stone assemblage with a comparably weak biface assemblage and <u>low frequency of faunal remains</u>, <u>which lack of associated organic artifacts</u> is indicative of the Early Holocene Millingstone adaptive pattern. Since artifacts indicative of later periods were not discovered, the site appears to represent a single occupational component. Such sites are uncommon in the area. Even though the site has been plowed and post-depositional movement has occurred at the site, these processes have not diminished the integrity of the deposit to the extent that interpretation of site use, period of occupation, and activities are not possible. The site still has the ability to convey its important data and, therefore, the prehistoric component of CA-SLO-2798/H is considered significant under CRHR Criterion 4 and is eligible for listing on the CRHR.

Octagonal silo foundation feature P-40-038310 may be associated with the Pereira Octagon Barn due to its presumed age and proximity; however, there is no direct evidence that P-40-038310 is associated with the barn, its builders, or its operations and is therefore is not considered significant under Criterion 1 or 2 of the CRHR because there is not substantial evidence indicating that it significantly contributes to the broad patterns of California's history and cultural heritage. Although the shape of the foundation is distinctive, it is not defined as "unique," as documentary evidence suggests that various agriculturalists experimented with octagonal silos during the early twentieth century. As a result, it is not significant under Criterion 3 of the CRHR as it does not represent the work of an important creative individual. Neither is the feature significant under CRHR Criterion 4 because it lacks the potential to provide new or important data useful for interpretation or documentation of early subsistence and land use patterns in San Luis Obispo County that is not available from other sources. As such, and further described in the Cultural Resources Inventory and Evaluation, this resource was determined to be ineligible for listing on the CRHR (Schinsing et al. 2015). Thus, no further consideration of this feature is warranted.

Native American consultation was initiated for this Project. Applied Earthworks, Inc. contacted the NAHC to determine whether any sites recorded in the Commission's Sacred Lands File occur in or near the study area. On July 6, 2015 the NAHC supplied a list of local Native American individuals and/or groups with interests and knowledge about the area. In compliance with SB 18

and AB 52, the City initiated requests for consultation from Tribal agencies on November 3, 2016. Consultation letters are included in Appendix K. Confidential consultation is ongoing. To date, no information has been received through the consultation process which would require further analysis of Cultural Resources beyond that which is present in Section 3.5.4.3, below.

3.5.4.3 Project Impacts, Mitigation Measures, and Residual Impacts

This section discusses the potential cultural resources impacts associated with the Project. Table 3.5-3 below summarizes these impacts.

Table 3.5-3. Summary of Project Impacts

Cultural Resources Impacts	Mitigation Measures	Residual Significance
CR-1. The Project would result in adverse impacts to the octagonal silo foundation, historic feature P-40-038310.	None required	Less than Significant
CR-2. Development and grading would result in direct significant impacts to known prehistoric resources within the Project site.	MM CR-2a MM CR-2b	Significant but Mitigable
CR-3. Earthwork and ground disturbing construction activities for the Project could potentially uncover significant unknown prehistoric or historic archaeological resources. If improperly handled, such resources could be adversely impacted.	MM CR-3a MM CR-3b	Significant but Mitigable

Impact CR-1 The Project would result in adverse impacts to the octagonal silo foundation, historic feature P-40-038310 (Less than Significant).

One historic feature was identified within the Project site, described as an octagonal foundation that once supported a grain silo. Construction of the Buckley Road Extension would demolish feature P-040-038310, which would result in the permanent loss of the feature. However, this feature is not considered a significant historical resource and is not eligible for listing on the CRHR. Per Section 15064.5(b) of the State CEQA Guidelines, project effects on historic resource P-040-038310 are not considered significant and environmental impacts would be adverse but *less than significant*.

Impact CR-2 Development and grading would result in direct significant impacts to known prehistoric resources within the Project site (Significant but Mitigable).

Construction of the Project would involve substantial grading and excavation in areas that could contain significant subsurface archaeological remains. Excavation associated with the Project's

grading plan would reach depths of up to 15 feet below the ground surface (bgs), and would have the potential to encounter, disturb, and displace buried prehistoric archaeological deposits thought to be from the Early Holocene Period within 7,000 to 10,000 years ago.

Prehistoric site CA-SLO-2798/H is located within the area proposed for development of R-1 Low-Density single family residential housing. In this area, site preparation and grading activities would take place as part of Phase 5 construction and would have the potential to cause damage to this identified significant resource. This would include excavation and fill of approximately 62,700 cubic yards (cy) of soil, including raising the building pads, for lots 526 to 535, 2 to 8 feet above the existing grade and excavating to lower the building pads, for lots 582 to 605, 1 to 10 feet below the existing grade. In addition, trenching would be required for a gravity wastewater line, a water line directional bore, a storm drain line, and other utility connections serving the proposed residences.

Project development and site grading would lead to substantial damage to this prehistoric archaeological site. According to the Project design, a total of 3.8 acres of the 11.3 acres of CA-SLO-2798/H would be disturbed below the present ground level, potentially disturbing or eliminating remains within this 3.8-acre area. Much of the remainder of the site would be subject to disturbance due to heavy equipment operation for placement of substantial amounts of fill, and construction of housing pads. Portions of the site are also outside areas proposed for development.

If feasible, preservation of the resource in place is the preferred measure for mitigating adverse impacts on archaeological resources. As described in Section 15126.4 of the CEQA Guidelines, preservation in place can be accomplished by redesigning a project so the site is avoided; incorporating the site into parks, greenspace, or other open space; covering the site with a layer of soil and then building only in the fill material; or deeding the site into a permanent conservation easement. However, due to other overall site constraints which limit developable area on the property, the key Project goals to provide substantial amounts of new housing, and the necessary relocation and design of the underground utility structures, avoidance of prehistoric site CA-SLO-2798/H would require major Project redesign. Such a redesign would likely lead to potential associated loss of housing and resultant major conflicts with key Project objectives. Because artifacts are scattered throughout the entire 11.3-acre archeological site and past testing has not revealed a central locus or high density area that could be avoided in order to retain the integrity of the site and avoid impacts, avoidance would require leaving the 15 acre site undisturbed.

Avoidance of this important archaeological site would remove approximately 20 percent of the developable area from the Project. Avoidance would require substantial Project redesign, including relocation and/or removal of about one third to one half of the Project's R-1 units with

approximately 40 R-1 lots ranging from 4,700 to 6,800 sf in size that are proposed within this area. In addition, avoidance of the CA-SLO-2798/H site would result in redesign of the internal roadway circulation as the connections of local roads to the Earthwood Lane, Venture Drive, and Jesperson Road Extension collectors would need to be altered. Avoidance of the prehistoric site would require the relocation and/or removal of "M" Street, "O" Street, and "P" Street which are all proposed 48-foot residential roads. Major sewer, water supply, and stormwater conveyance lines that are part of the utility system that support the entire Project would also need to be relocated. The proposed gravity wastewater line underlying the proposed "M" Street, water supply line under "K" Street, and storm water conveyances under "K", "M", "O", and "P" Streets would need to be moved.

Because of the requirement for major Project redesign, potential loss of housing, required major redesign of infrastructure and potential inability to meet Project objectives, avoidance of the CA-SLO-2798/H site was found to be infeasible. In particular, current constraints that limit the avoidance option include the Urban Reserve Line (URL) and required open space buffers, ALUP and City density restrictions within ALUP Safety Areas and City Airport Overlay Zones (AOZs), the Tank Farm Creek setbacks all of which restrict ability to relocate R-1 housing and infrastructure. Relocation of housing and infrastructure may also result in further impacts to other environmental resources such as onsite wetlands, potential conflicts with ALUP Safety Area and City AOZs and LUCE requirements for open space allotments. Further, the LUCE designates the Project site as a Specific Plan Area that encourages development of housing for a range of income types. Reduction in housing as a result complete avoidance of CA-SLO-2798/H may conflict with the LUCE objectives to provide substantial housing (Applied Earthworks 2016; see Appendix K).

Due to these circumstances, archaeological data recovery and construction monitoring to compensate for the impacts to this significant resource provide mitigation that would reduce the impacts to less than significant levels, consistent with both Project Objectives and achieving LUCE goals for substantial housing development on this site. As outlined in the Applied EarthWorks, Inc. technical report (Schinsing et al. 2015; see Appendix K), in this case, data recovery can be accomplished through controlled grading of the site prior to construction to seek buried features and additional diagnostic artifacts, along with subsequent analysis and documentation. As a result, impacts to this resource would be *significant but mitigable*.

Mitigation Measures

MM CR-2a Data recovery through controlled grading of CA-SLO-2798/H shall occur prior to the start of construction to seek buried features and additional diagnostic artifacts.

The Applicant shall retain a Registered Professional Archaeologist familiar with

the types of historic and prehistoric resources that could be encountered within the Project site and a Native American monitor to supervise the controlled grading, which shall occur in 10-centimeter lifts to culturally sterile sediments or maximum construction depth (whichever is reached first).

Any formed tools exposed during grading shall be collected. If archaeological features are exposed (including but not limited to hearths, storage pits, midden deposits, or structural remains), the archaeologist shall temporarily redirect grading to another area so the features can be exposed, recorded, and sampled according to standard archaeological procedures. Organic remains shall be dated using the radiocarbon method and the geochemical source and hydration rim thickness of any obsidian shall be determined. Technical analyses of plant remains, bone and shell dietary debris, and other important materials shall also be performed.

Artifacts, features, and other materials recovered through this process shall be described, illustrated, and analyzed fully in a technical report of findings; the analysis shall include comparative research with other sites of similar age. In addition to the technical report, the findings from this research shall be published in an appropriate scientific journal. The Applicant shall fund all technical reporting and subsequent publication.

<u>Plan Requirements and Timing</u>. Controlled grading of CA-SLO-2798/H shall occur prior to other earthwork, grading, and ground disturbing activities in Phase 5. Phase 5 grading plans submitted to the City shall reflect controlled grading methods within the plan notes. Technical analysis and reporting shall be completed within 18 months following completion of the controlled grading.

Monitoring. The City shall ensure the grading plans for Phase 5 development reflect a controlled grading approach to allow appropriate monitoring of the site in compliance with this mitigation measure. The Project archaeologist and Native American monitor shall ensure compliance during construction.

MM CR-2b Following completion of controlled grading of CA-SLO-2798/H, the Applicant shall retain a Registered Professional Archaeologist and a Native American consultant to monitor all further earth disturbances within Phase 5 to ensure that previously unidentified buried archaeological deposits are not inadvertently exposed and damaged. In the event archaeological remains are encountered during

grading or other earth disturbance, work in the vicinity shall be stopped immediately and redirected to another location until the Project archaeologist evaluates the significance of the find pursuant to City Archaeological Resource Preservation Program Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with City Guidelines and funded by the Applicant.

Plan Requirements and Timing. The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for Phase 5 of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with the Registered Professional Archaeologist. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards.

Monitoring. City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check field work. The Native American monitor and/or Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.

Residual Impact

As avoidance of prehistoric resource site CA-SLO-2798/H would result in conflicts with LUCE goals and Project Objectives, controlled grading and artifact recovery would take place within the prehistoric site area allowing for documentation for the site and preservation of recovered artifacts.

While prehistoric sites such as CA-SLO-2798/H are uncommon in the area, monitoring, adherence to the City-approved archaeological testing and mitigation program, and artifact recovery and documentation would reduce impacts to a less than significant level after mitigation.

Impact CR-3 Earthwork and ground disturbing construction activities for the Project could potentially uncover significant unknown prehistoric or historic archaeological resources. If improperly handled, such resources could be adversely impacted (Significant but Mitigable).

The Project vicinity was a favorable environment for historic and Native American settlement and as previous discoveries have presented, there is potential for unknown prehistoric or historic archaeological deposits to occur within the Project site and offsite improvements (e.g., Buckley Road Extension, roadway improvements, and utility easements). The Project involves multiple

offsite improvements that would occur within previously disturbed areas that have a low risk of containing undisturbed and intact artifacts. Nonetheless, ground disturbing construction activities within the Project site and offsite areas present the possibility to encounter a potential undiscovered archaeological resource. If unknown archaeological resources are discovered during construction and improperly handled, the archaeological resources could be adversely impacted resulting in a *significant but mitigable* impact.

Mitigation Measures

MM CR-3a

Prior to the issuance of building and grading permits for Phase 1, the Applicant shall retain a City-approved Registered Professional Archaeologist and a Native American monitor to be present during all ground disturbing activities within the Project site and Buckley Road Extension site. In the event of any inadvertent discovery of prehistoric or historic-period archaeological resources during construction, all work within 50 feet of the discovery shall immediately cease (or greater or lesser distance as needed to protect the discovery and determined in the field by the Project archaeologist). The Applicant shall immediately notify the City of San Luis Obispo Community Development Department. The Project archaeologist shall evaluate the significance of the discovery pursuant to City Archaeological Resource Preservation Program Guidelines prior to resuming any activities that could impact the site/discovery. If the Project archaeologist determines that the find may qualify for listing in the CRHR, the site shall be avoided or shall be subject to a Phase 3 mitigation program consistent with City Guidelines and funded by the Applicant. Work shall not resume until authorization is received from the City.

Requirements and Timing. The conditions for monitoring and treatment of discoveries shall be printed on all building and grading plans. Prior to issuance of building and grading permits for each Phase of the Project, the Applicant shall submit to the City a contract or Letter of Commitment with the Registered Professional Archaeologist. The City shall review and approve the selected archaeologist to ensure they meet appropriate professional qualification standards.

Monitoring. City permit compliance staff shall confirm monitoring by the archaeologist and tribal representative and City grading inspectors shall spot check field work. The Native American monitor and/or Project archaeologist shall ensure that actions consistent with this mitigation measure are implemented in the event of any inadvertent discovery.

MM CR-3b Prior to construction, workers shall receive education regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources, during construction. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified archaeological materials, including Native American burials, are discovered during construction. Training would also inform construction personnel that exclusion zones must be avoided and that unauthorized collection or disturbance of artifacts or other cultural materials is not allowed. The training shall be prepared by the Project archaeologist and shall provide a description of the cultural resources that may be encountered in the Project site, outline steps to follow in the event that a discovery is made, and provide contact information for the Project archaeologist, Native American monitor, and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to archaeological resources is provided by a qualified instructor meeting applicable professional qualifications standards.

Requirements and Timing. Prior to earthwork activities for each phase, construction workers shall participate in an educational program that will enable them to recognize and report possible buried cultural remains and protect all cultural resources, including prehistoric and historic resources. The educational program shall be outlined within the archaeological testing and mitigation program and submitted to the City for approval prior to issuance of grading permits for each phase.

Monitoring. The Project archaeologist shall verify the training has been completed by all construction workers and shall ensure construction workers follow cultural resource recovery protocols.

Residual Impact

Implementation of the above mitigation would ensure that appropriate precautions and protection measures are taken to avoid potentially significant impacts to unknown or undiscovered archaeological resources during construction activities on- and offsite. After mitigation, impacts would result less than significant residual impacts.

3.5.4.4 Cumulative Impacts

For cultural resources, the geographic extent of cumulative impacts encompasses a relatively broad area as the significance or importance of any individual resource can only be judged in terms of its regional context and relationship to other resources. Thus, the significance of impacts on any given resource or group of resources must be examined in light of the integrity of the regional resource base. Because the number of cultural resources is finite, limited, and nonrenewable, any assessment of cumulative impacts must take into consideration the impacts of the Project on resources within the Project site; the extent to which those impacts degrade the integrity of the regional resource base; and impacts other projects may have on the regional resource base. If these effects, taken together, result in a collective degradation of the resources base, then those impacts are considered cumulatively considerable.

For the Project, the regional resource base is defined geographically, historically, and with reference to the specific relevant government jurisdictions. The geographic scope of the cumulative impact analysis takes in a region encompassing the City of San Luis Obispo and San Luis Obispo County. In this EIR, the cumulative impact analysis includes the Project and the list of past and future projects identified in Table 3.0-1, Cumulative Projects List, in Section 3.0, *Environmental Impact Analysis and Mitigation Measures*.

Cumulative projects would be required to comply with General Plan Policies COS 3.5.5, 3.5.6, and 3.5.7, described in Section 3.5.3, *Regulatory Setting*, and would be subject to review by the CHC for conformance with guidelines for cultural resources protection. Further, cumulative projects would be subject to environmental review under CEQA, which requires avoidance of significant historical resources whenever feasible; if avoidance is not feasible, then appropriate mitigation measures would be applied (CEQA State Guidelines Section 15126.4). This would result in minimization of cultural resource impacts resulting from cumulative Projects in the area. The Project would mitigate impacts to cultural resources with implementation of MM CR-2a and 2b, and MM CR-3a and b, and therefore would not contribute to cumulatively considerable impacts to cultural resources. As such, cumulative impacts are considered *significant but mitigable*.