

3.6 Cultural Resources

Cultural resources are historic and prehistoric archaeological sites, historic architectural and engineering features and structures, and sites and resources of traditional cultural significance to Native Americans and other groups. A cultural resource inventory was conducted to identify and document potentially significant cultural resources within the area of potential effect (APE) for both the Lompoc Wind Energy Facility (LWEF) and the 115-kV power line. The APE includes areas where ground disturbance would occur, including the wind turbine generator (WTG) sites and associated access roads, areas that would be trenched to accommodate electrical lines, Project Substation, Operations and Maintenance (O&M) facility, power pole locations, and staging areas estimated to comprise approximately 53.57 acres. The inventory involved: (1) a background literature search of the Project area, including review of a previous cultural resources investigation conducted for the Project (Spanne, 2005); (2) identification and documentation of pre-1960 resources within the Project area through pedestrian surveys; and (3) a preliminary assessment of the potential significance of identified resources according to California Environmental Quality Act (CEQA) criteria. Cultural resources surveys took place in June, July, and August of 2002; June, July, and August of 2005; and September of 2006, in compliance with Section 5024.1(g) of the California Public Resources Code. This section synthesizes the results of the inventory and draws heavily from Spanne, 2005.

3.6.1 Existing Conditions

3.6.1.1 Prehistoric Setting

The creeks, river valleys, and floodplains in the vicinity of the Project, including the fringing coastline, have supported a continuous cultural occupation for at least the last 9,000 years. An early Holocene occupation, which reflects the early emergence of nonagricultural, village-based groups in the region, has been identified in the archaeological record. Current archaeological evidence suggests that a relatively small population existed in these areas, but by 2,000 years before present (B.P.), populations appear to have expanded considerably into resource-rich coastal and near-shore, estuarine environments (Dillon, 1990). Accounts by Juan Rodríguez Cabrillo (Wagner, 1929) and Sebastian Vizcaino (Bolton, 1930) indicated that by the time of European contact to this area of the California coast, some of the large, coastal villages had hundreds of occupants and were engaged in both terrestrial and maritime long-distance trade.

Paleoindian Period

The San Dieguito Complex, which extends from roughly 12,000 B.P. to 7,000 B.P. (Wallace, 1978; Warren, 1967), is found throughout Southern California and includes nonfluted points such as leaf-shaped projectile points and various leaf-shaped, bifacial tools. Unfortunately, there are few reliable published radiometric dates from this period, with most of the artifacts identified as isolated find spots.

One fluted-point fragment is known from the Santa Barbara area. The artifact, consisting of a basal fragment from a fluted point, was found at CA-SBA-1951 on the coastal plain to the west of Santa Barbara (Erlandson et al., 1987; Erlandson, 1994).

The Millingstone Period

The Millingstone Period extends to at least 6,000 B.P. and probably as far back to 8,500 or more B.P. (Wallace, 1955; Warren, 1968). Hard seed processing became one of the major components of subsistence during this period. Overall, the economy was based on plant collecting, but was supplemented by fishing and hunting, and general exploitation of marine and estuarine resources (Wallace, 1955). Large, heavy, ground stone milling tools such as deep basin metates and wedge-shaped manos, and large core/cobble choppers and scrapers, typify the Millingstone Period.

In the northern Channel Islands, two sites have produced fairly reliable early Holocene dates. Radiometric dates have been obtained from shells at Daisy Cave, on San Miguel Island (Erlandson et al., 1996; Rick et al., 2001), and human remains were found in a secure early Holocene context on Santa Rosa Island at Arlington Springs (the so-called Arlington Woman). Both sites did not have extensive archaeological remains, but nevertheless, these dates put humans on the Channel Islands by at least 9750 B.C., and possibly earlier (circa 11000 B.C. for the Arlington Woman).

Along Santa Barbara coastal areas, Millingstone sites are common on terraces and knolls, typically set back from the current coastline (Erlandson, 1994; Glassow et al., 1988). The larger sites usually contain extensive midden deposits, possible subterranean house pits, and cemeteries. Most of these sites probably reflect intermittent use over many years of local cultural habitation and resource exploitation. Erlandson has noted that the typical Millingstone manos/metates are not common on contemporaneous Channel Island sites, possibly reflecting an alternate insular resource exploitation (Erlandson, 1994).

The Intermediate Period

The Intermediate period has also been called the "Hunting Period" or "Middle Horizon." About 5000 years B.C., the Millingstone traditions, with their heavy reliance on vegetal food sources, began to gravitate more toward animal proteins and marine resources. Procurement of plants for caloric intake was not necessarily replaced in kind by game hunting, but rather the local Millingstone dietary regimen began to transition toward alternate resources. Mortars and pestles predominate the tool kit, rather than manos and metates. Glassow has hypothesized that, in the Santa Barbara geographic setting, this could reflect greater use of acorns (Glassow et al., 1988). In the Santa Barbara area, the reliance on shellfish probably declined during the Intermediate Period, as the maritime and coastal marine exploitations expanded into the aforementioned terrestrial resources (Erlandson, 1988).

The Late Prehistoric Period

The Late Prehistoric Period probably began sometime around the B.C./A.D. transition, but expanded culturally around A.D. 500 with the introduction of bow and arrow technology (Meighan, 1954). The end of the period is recognized as the end of the 18th Century, when full implementation of the Spanish Mission system took effect on the native populations.

The Santa Barbara coastal areas, along with the western areas of Ventura and the Los Angeles Basin, were occupied during the Late Prehistoric Period by the so-called "Canaliño" culture (Rogers, 1929). During this period, the coastal populations expanded greatly and probably took advantage of a wide variety of ecological niches, especially marine resources. Small projectile points, frequently side-notched, are typical in the bow

and arrow-based toolkit. Specialty items such as basketry, ollas or large water vessels, shell and stone beads, and shell and bone fish hooks appear, as does elaborate rock painting (Grant, 1965). Anthropologists believe that the Chumash are directly descended from the Canaliño culture of the archaeological record.

During the Late Prehistoric Period, a highly advanced fishing and hunting strategy developed that included the exploitation of a wider variety of fish and shellfish. These new subsistence strategies, coupled with the appearance of the bow and arrow, enabled a substantial increase in local populations, the development of permanent settlements, and a “money” economy based on the shell trade.

3.6.1.2 Ethnographic Setting

During the late prehistoric period and early in historic times, the study area was part of the territory occupied by the Purismeño branch of Chumash-speaking people (Kroeber, 1925). The Chumash were an unusually sophisticated group of hunter-gatherer people who occupied the coastline, adjacent interior, and offshore islands from Malibu in the south to the vicinity of Estero Bay in the north. More detailed information on the Chumash is available in Gibson (1991), Grant (1965), Hudson and Blackburn (1979-1986), King (1971) and Landberg (1965). At the time of early Spanish exploration of this area, several Chumash villages were located within a few miles of the Project site in all directions. The villages nearest the Project area were Lompo’ (translated as “stagnant water”) located in the lower Lompoc Valley, Sipuc (translated as “elbow”) located a few miles east of the City of Lompoc along the Santa Ynez River, Nocto (translated as “eel”) located along the coast several miles to the southwest, and Shilimqshtush (no translation) located at Jalama Beach County Park (Applegate, 1975). During the Spanish Mission period and subsequent Mexican Rancho period, the Project area was used for grazing livestock, a practice that has continued up to the present day. This area was also once part of the original Mexican Land Grant Rancho Lompoc.

The Late Prehistoric Period Chumash, with a Hokan linguistic stock, lived in large villages along the coast and the wide valleys leading into the California interior. This was an ethnohistoric boundary group situated between the Chumash to the northwest and the Gabrieliño to the south and east. In the archaeological record, the Gabrieliño material culture (Bean and Smith, 1978; Blackburn, 1963; Johnston, 1962) is often (but not always) indistinguishable from the Chumash (Grant, 1965, 1978a,b; Landberg, 1965).

The Chumash were highly sea-oriented. Given the presence of earlier sites on the offshore islands, this evidence suggests that there was a maritime tradition at least partially carried over from the Millingstone and Intermediate Period cultures (Harrington, 1978). By at least 1,000 B.P., the Chumash were relying on blue-water vessels in an exploitation strategy partially based on deep-sea fishing and marine mammal hunting.

Although a number of archaeological studies have taken place in the vicinity of the Project over the past 20 years, the archaeology and prehistory of the general area are still not well understood. This is due, in part, to the fact that most studies have been conducted at the Phase 1 Cultural Resource survey level, such as the current one, with few excavations. The notable exceptions are a number of excavations carried out on nearby Vandenberg Air Force Base (VAFB) over the last 25 years or so. These studies indicate that people have probably

inhabited this general area for about 9,000 years or more (Applied Earthworks, 2001). The development of prehistoric ways of life in this region culminated with the appearance of the complex culture of the Chumash people during the last thousand years or so.

3.6.1.3 Historic Setting

The first known European entry into the area was the expedition of Juan Cabrillo who sailed north along the California coast from Mexico in 1542. His two ships reached the Santa Barbara Channel in October 1542, and after several tries, were able to round Point Conception and sail as far north as San Francisco Bay (Chesnut, 1993).

A second Spanish expedition arrived in the area in 1602, which consisted of two ships under the command of Sebastian Vizcaino. His aim was to follow Cabrillo's route and reassert Spanish claims to the area. Naming local landmarks after saints' days on which they were discovered, he named the harbor of Santa Barbara on Saint Barbara's feast day (December 4), and Point Conception on the Feast of the Immaculate Conception (December 8). Vizcaino sailed as far north as Monterey Bay, eventually returning to Acapulco.

In the 1760s, the Spanish government decided to establish a series of military establishments called presidios and missions along the California coast between the two great natural harbors of San Diego and San Francisco (Weber, 1982, 1992). These establishments countered against feared occupation of the coast by Russian or English forces.

As a function of this effort by the Spanish government to establish military presence on the West Coast, an expedition left the colony at San Diego in the summer of 1769 under the command of Don Gaspar de Portola, the governor of Baja, California. The objective was to locate an overland route to Monterey Bay and prospect for presidio locations along the route. Portola's expedition passed through the area on its return to San Diego (Chesnut, 1993).

Following Portola's expedition, Spanish visits and activity increased. An expedition led by Juan Bautista de Anza passed through the area in spring of 1776. A presidio was established at Santa Barbara in 1782 to fill the gap between the previously established presidios in Monterey and San Diego. This established a permanent European presence in the area, and was shortly followed by the establishment of the Missions at Santa Barbara in 1786. This mission had a strong effect on the Chumash in the vicinity of the Project.

It seems certain that a number of the Chumash left for the missions, though chapels were built for those remaining in rancherias in the Goleta area. The Chumash who did move to the missions worked in agriculture or herding, and steps were taken to assimilate them to European styles of life. This also proved to be dangerous to the health of the Chumash populations, as they were exposed to European diseases to which they had no immunity. During this period, Chumash populations went into a steep decline.

When Mexico gained its independence from Spain in 1821, Alta California became part of the new country. Approaches to church control changed as government control devolved to Mexico City and to the Mexican territorial and state governors.

It had never been the intention of the Spanish and the successor Mexican government that the missions would remain as permanent entities controlling the economy of the frontier

areas (Weber, 1982). With independence, the Mexican government began a process of secularization of mission properties that was concluded in 1833. Missions were turned into parish churches, and regional commissions were established to dispose of the properties and resettle the Indians affiliated with the missions. Mexican government policy was to give mission properties and other unclaimed land to prominent citizens who would be required to build homes and facilities and develop the properties. The period of California history known as the Rancho Period, began as a class of wealthy landowners known as “rancheros” controlled the state. They built large ranches based on cattle hide and tallow production.

Approximately 40 of these land grants were made in Santa Barbara County during this period (Avina, 1973; Chesnut, 1993; Tompkins, 1976, 1987).

The United States and Mexico went to war in 1846 over the annexation of Texas. With the end of the war in 1848, the Treaty of Guadalupe-Hidalgo ceded California to the United States (Weber, 1982). The annexation of California dislocated the dominant Hispanic culture due to the change in government control and the influx of large numbers of Anglo-Americans. Land titles were a major source of conflict between the two cultures. In 1851, a land act was passed that required the Mexican and American courts to confirm Spanish land grants. Many of the ranchos were broken up, as owners were unable to produce sufficient documentation to satisfy the courts.

During the Spanish Mission period and subsequent Mexican Rancho period, the Project area was used for grazing livestock, a practice that has continued up to the present day. This area was also once part of the original Mexican Land Grant Rancho Lompoc.

3.6.2 Resources Inventory

Inventory methods for the Project consisted of archival research, a pedestrian survey, and consultation with the Native American Heritage Commission (NAHC).

3.6.2.1 Background and Archival Research

Records and literature searches were conducted at the Central Coast Information Center of the California Historical Resources Information System (CHRIS) for this Project by Larry Spanne in 2002 and 2005 (Spanne, 2005) and Clint Helton of CH2M HILL on January 17, 2007. The latter records search was conducted to account for the addition of the power line and additional turbines and access roads in the Larsen Corridor. The records search provided information regarding both historic and prehistoric cultural resources. The search of the power line corridor included a 0.5-mile buffer on either side of the centerline for the entire 7.85-mile length. The results of both searches revealed that numerous archaeological sites had been previously recorded within 2 miles of the LWEF site and power line corridor, although only seven of these sites are located within or at the boundaries of these areas. Very few surveys have been conducted within the LWEF site and power line corridor, which probably explains the low number of archaeological sites previously recorded here. Nevertheless, the presence of a higher density of archaeological sites on nearby VAFB property suggests that the Project area is archaeologically sensitive.

3.6.3 Field Survey

Pedestrian field survey of all Project elements was conducted in 2002 and 2005 by Laurence W. Spanne (Spanne, 2005), and in September 2006 by Clint Helton, RPA, of CH2M HILL. The Phase 1 Archaeology Study conducted by Mr. Spanne was part of a Phase 1 Study requested by the Project Applicant, Pacific Renewable Energy Generation, LLC. The Phase 1 Study conducted by Mr. Helton was requested by the County of Santa Barbara.

Field methods remained consistent for all episodes of field investigation, including the final investigation by CH2M HILL in September 2006. The entire building envelope, including the WTG locations, O&M facility, Project Substation, access road corridors, staging areas, power line route and power pole locations, and surrounding buffer zones comprising a total of about 1,036 acres, was surveyed intensively on foot along parallel transects at intervals no greater than 50 feet. In the case of road corridors, an area at least 50 feet wide was covered on each side of the road. In cases where there was no existing road, a wider corridor was surveyed to ensure that the actual proposed alignment of the road was covered and to accommodate future minor changes in alignments. For power pole angle structure locations, at least a 100- by 100-foot area, centered on the center of the location of the angle structure, was surveyed. Areas of steep slope (25 percent or greater) and impenetrable vegetation within the areas surveyed were generally not examined, except for rock outcrops and possible rock shelters.

A close examination of the ground surface was accomplished along each of the parallel survey transects. All vegetation-free areas were carefully observed in order to identify artifacts or other culturally derived materials that might have been present. The surface visibility generally ranged from fair to good at the time of the survey. Some very small archaeological sites might have been overlooked in areas of particularly dense ground cover, and other sites may have been destroyed or buried by slope failure in the form of landslides and slumps, particularly in areas of steep slope or unstable soils. No other problems were encountered that might have affected the results of the investigation.

3.6.4 Results of Field Surveys

As a result of the field surveys, 11 previously unrecorded archaeological sites were documented. Seven previously recorded archaeological sites are present within the APE, and the boundaries of two of these were expanded based on new observations. All of these sites appear to be prehistoric, although their age is not known. In addition, 11 archaeological isolates (isolated artifacts), some of which may be archaeological sites, were recorded. Descriptions of each of these archaeological sites and archaeological isolates are found in the following subsection. Official State of California Site Record Forms, both Primary and Archaeological are provided as part of the Confidential Cultural Resources Technical Appendix C of this Environmental Impact Report (EIR). This appendix is composed of Appendix C.1, Supplemental Cultural Resources Inventory Report prepared by CH2M HILL in June 2007, and Appendix C.2, Phase I Archaeological Survey Report prepared by Laurence W. Spanne in August 2005. This appendix has been submitted confidentially under separate cover.

All of the archaeological sites within the Project area contained exclusively lithic waste and stone tools. No faunal remains, evidence of fires or ovens, features indicative of dwellings, rock art, or human remains were observed at any of the 18 archaeological sites. Ten of the sites appear to have functioned primarily as lithic workshops, while four appear to have functioned as chert (tool stone) quarries. Four of the sites, all located near water sources and featuring heavier concentrations of artifacts, with some indication of plant food preparation, may have also functioned as overnight camps. One of these may be associated with a prehistoric trail.

A list of archaeological sites recorded within the Project area along with brief descriptions of key characteristics and other information is presented below. Results are discussed separately below for the WTG corridors and associated elements, and for the power line component of the Project.

3.6.4.1 Turbine Corridors, Access Roads, Staging Areas, Substation, and Other Turbine-related Facilities

A brief description for each site follows below. Newly recorded sites were given a unique identification number beginning with "LWF" (Lompoc Wind Facility [for example, LWF-1]). Previously recorded sites are referred to using their state Smithsonian trinomial number (for example, CA-SBA-2756). Smithsonian trinomial numbers are considered permanent site identifications that do not designate eligibility or ineligibility.

LWF-1/CA-SBA-2756 (Prehistoric with Potentially High Significance)

This archaeological site was recorded in the field as LWF-1, and it was determined to be related to CA-SBA-2450, a small site at its southernmost boundary. It was later discovered that a portion of the site had also been earlier recorded as CA-SBA-2756. However, the LWF-1 boundaries observed during the current Project greatly exceeded those recorded in 1995. This was due to the fact that Wahoff and others did not have permitted access to most of the area of the site.

CA-SBA-2756 is the largest archaeological site in the Project area with dimensions of approximately 1,815 feet by 1,155 feet. These site boundaries are in part based on maps in the original site record that were derived from information from subsurface testing carried out by Parsons Engineering (1996) in support of a project on nearby VAFB. CA-SBA-2756 features a medium to high surface density of cultural material including shatter, macro or primary reduction flakes, secondary thinning flakes, a relatively small proportion of tertiary or retouch flakes, numerous broken bifaces, a small bipointed projectile point, quartzite hammerstones, and ground stone including bifacially and edge-ground manos or handstones. The flaked stone artifacts consist exclusively of variegated Monterey chert in a wide range of colors. Similar artifacts and materials were noted during the 1996 Parsons investigation. The highest artifact densities are in the area west and northwest of the small stream channel. The author had occasion to view this site in the late 1950s after a major rainstorm; at that time, there were numerous ground stone artifacts and complete large bifaces exposed by stream erosion in the area of the small channel above the existing spring. A depth of approximately 5 feet is indicated in a cut bank.

Site CA-SBA-2756 may have some considerable antiquity, as suggested by the presence of manos. The grayish sandy soil, the variety of artifacts present, greater depth high artifact

density, and location near a water source, all suggest that this may be a short-term habitation site or campsite where plant food processing took place. A primary function of the site appears to have been lithic reduction for the purpose of chert biface production. Human remains could be present in this cultural deposit. It is not unlike CA-SBA-1823, a site recently subjected to test excavations and located not far from the Project area on nearby VAFB (Harro, Lebow, and McKim, 2001). CA-SBA-1823 may date to the Early Period or Early Holocene. CA-SBA-2756 is considered to be highly significant due to its unusual type, excellent state of preservation, and data potential based on its use in lithic reduction and for possible short-term habitation. However, a Phase 2 Archaeological Investigation would be required to more reliably establish the significance of CA-SBA-2756.

LWF-2 (Prehistoric with Potentially Low Significance)

This archaeological site (LWF-2) measures approximately 840 feet by 500 feet and has a somewhat amorphous shape. It features a very low surface density of cultural material consisting of Monterey chert artifacts including mostly secondary thinning flakes, shatter, a few tertiary retouch flakes, two utilized flakes, and two cores. All of these artifacts are variegated orange, root beer, cream, tan, and dark gray Monterey chert. Four isolated chert flakes were found up the ridge and a short distance beyond the northern boundary of the site. These are treated as isolates (Isolates 8 through 11) and described below. The site deposit at LWF-2 is estimated to be no more than 1 to 2 feet in depth.

LWF-2 is tentatively categorized as a lithic reduction site or workshop. There is no compelling evidence that it was anything but a day-use location. Although it is not considered to be highly significant, its potential to yield data on lithic reduction techniques suggests the site may be somewhat significant. A more reliable significance determination would require a Phase 2 Archaeological Investigation with subsurface testing.

LWF-3 (Prehistoric with Potentially Low Significance)

This archaeological site (LWF-3) measures about 305 feet by 160 feet and has a roughly teardrop shape. The site features a low surface density of cultural material that consists mostly of secondary thinning flakes and shatter of banded, variegated orange, root beer, cream, tan, and dark gray colored Monterey chert. No formal artifacts were observed on the surface of this site. Although difficult to estimate without a subsurface test, this site is probably only 1 to 2 feet in depth.

LWF-3 is tentatively classified as lithic workshop or reduction site. There is no compelling evidence that it was anything but a day-use location. Therefore, the site is considered to have low significance due to its limited data potential. However, a Phase 2 Archaeological Investigation would be required for a more reliable significance determination.

LWF-4 (Prehistoric with Potentially Medium Significance)

This archaeological site (LWF-4) measures about 835 feet by 530 feet and is somewhat crescentic in shape. It features a medium surface density of cultural material including mostly secondary thinning flakes with small quantities of primary reduction flakes, tertiary retouch flakes, and shatter. The lithic material is variegated orange, root beer, yellowish-tan, cream-white, and dark gray Monterey chert along with a single piece of reddish Franciscan chert. Other artifacts observed included many large and medium sized, broken bifaces, and chert cores. Based on the dark soil color, location near water, and greater variety of artifact content, it is estimated that this site may be up to 3 feet or more in depth.

LWF-4 appears to have functioned primarily as a lithic workshop or reduction site, but again, based on the dark soil color, location near water, and variety of artifacts; it may also have been used on occasion for short-term or overnight occupation. This site has medium significance based on its data potential as a short-term campsite and excellent state of preservation. A Phase 2 Archaeological Investigation would be required to more reliably establish the significance of LWF-4.

LWF-5 (Prehistoric with Potentially Medium Significance)

This archaeological site (LWF-5) measures approximately 815 feet by 400 feet, and its shape bilobal and curvilinear. It features a light to locally heavy surface density of cultural material consisting of primary reduction flakes and secondary thinning flakes, shatter, cores, broken and whole bifaces, and chunks of Monterey chert. This lithic material ranges in color from orange and root beer to dark gray. Definition of the eastern boundary of the site is made difficult due to the presence of a large block of landslide material that originated near the top of a high ridgeline to the east. Artifacts from an unrecorded archaeological site at that location are incorporated into the displaced slide material that was transported down slope to the vicinity of LWF-5. Based on the dark soil, location near water, and greater variety of artifact content, this site may have a depth of up to 3 feet or more.

LWF-5 appears to have functioned primarily as a lithic workshop or reduction site, but again, based on the dark soil, variety of artifacts present, and location near water, this site may also have functioned as a short-term occupation site or campsite. This site is tentatively assessed as having medium significance due to the data potential and excellent state of preservation. A Phase 2 Archaeological Investigation would be required to more reliably establish the significance of LWF-5.

LWF-6 (Prehistoric with Potentially Low Significance)

This archaeological site (LWF-6) measures approximately 825 feet by 545 feet and is roughly rounded-triangular in shape. The site is characterized by a light surface density of cultural material consisting of primary reduction flakes, secondary thinning flakes, shatter, chunks, biface fragments, and cores of Monterey chert. All of the chert is variegated and orange, root beer, and dark gray in color. This site is estimated to be relatively shallow and no more than 1 to 2 feet in depth.

LWF-6 appears to have functioned as a lithic workshop or reduction site. The site is tentatively assessed as having only low significance potential due to loss of integrity from erosion. A Phase 2 Archaeological investigation would be required in order to establish a more reliable significance assessment of the site.

LWF-7 (Prehistoric with Potentially Low Significance)

This archaeological site (LWF-7) has dimensions of approximately 1,050 feet by 520 feet and it is ovoid in shape. The site is characterized by a medium surface density of cultural materials consisting of shatter, chunks, large primary reduction flakes, cores, and broken bifaces of Monterey chert. The chert is mostly orange and root beer colored. There are also siltstone cobbles strewn about the site. The depth of LWF-7 is estimated to be 1 to 2 feet or less.

LWF-7 appears to have functioned as a lithic procurement site and lithic workshop. Chunks of Monterey chert derived from a primary deposit near the top of the high ridge to the east may have been transported down the slope by gravity or small slides. LWF-7 is tentatively assessed as having only low significance potential due to loss of integrity from heavy erosion. A Phase 2 Archaeological Investigation would be required to more reliably establish the significance of this resource.

LWF-8 (Prehistoric with Potentially Medium Significance)

This archaeological site (LWF-8) measures approximately 500 feet by 415 feet and is triangular in shape. The site features cultural materials in a low surface density of shatter, chunks, primary reduction flakes, and utilized flakes of variegated Monterey chert of orange, root beer, and dark gray colors. The depth of the site is estimated to be no more than 1 to 2 feet. Erosion caused by former cultivation and heavy grazing has affected the integrity of this site, but not nearly to the extent seen in LWF-6 and LWF-7.

LWF-8 appears to have functioned as a lithic workshop and possible overnight campsite. The site is tentatively assessed as having medium significance potential due to its perceived ability to yield data on lithic workshops and overnight campsites. A Phase 2 Archaeological Investigation would be necessary to more clearly establish site significance.

LWF-9 (Prehistoric with Potentially Medium Significance)

This archaeological site (LWF-9) has dimensions of 575 feet by 280 feet and is rounded triangular in shape. The site is characterized by a low surface density of cultural materials consisting of primary reduction and secondary thinning flakes, shatter, chunks, a utilized flake shaped like a spokeshave, and a basal fragment of a small, serrated, concave-based point of cream-gray chert. All of the material on the surface is derived from variegated Monterey chert in cream, light gray, orange, and root beer colors. The depth of the site is unknown, but could approach 3 feet. Erosion, caused by former cultivation and heavy grazing, have somewhat affected the integrity of this site.

LWF-9 appears to have functioned as a lithic workshop and possible rest stop along a prehistoric trail that may have connected the Lompoc Valley with Honda Canyon via Sloan's Canyon. Dora Salzman Byllings, the great aunt of Mr. Spanne and an early resident in San Pasqual Canyon, told him in the 1970s that she and her family had occasionally seen "Indians" walking up and down the canyon as late as the 1880s. LWF-9 is tentatively assessed as having medium significance due to its mostly excellent state of preservation and potential to yield information on what may be less well-known prehistoric activities. A Phase 2 Archaeological Investigation would be necessary to confirm this potential.

LWF-10 (Prehistoric with Potentially High Significance)

This site (LWF-10) covers an area of 815 by 420 feet and is ovoid in outline. The site is characterized by a medium to high surface density of lithic artifacts including primary macro flakes, secondary thinning flakes, chunks, shatter, cores, blades, and broken bifaces. All of the chert is orange to root beer colored. The depth of the site is unknown. The northernmost area of the site has been disturbed and mostly destroyed by bulldozing in and around an inactive rock quarry.

LWF-10 appears to have functioned as a chert quarry and biface production site. The site is tentatively assessed as having high sensitivity because it is relatively undisturbed and has

the potential to yield data about a type of prehistoric activity that in this region that is not well understood. A Phase 2 Archaeological Investigation would be necessary to more reliably assess the sensitivity of this site.

LWF-11 (Prehistoric with Potentially High Significance)

This site's (LWF-11) dimensions are unknown due to the fact that the site exists as a subsurface deposit. The dimensions, as described by Spanne (2005), are simply an estimate assuming that the site underlies most of the bench. The dimensions of the bench are approximately 320 feet long by 100 feet in width. An east-west trending fence crosses the site just north of the location where gravel was quarried. A small, shallow pit about 20 feet in diameter appeared to have been recently quarried, just exposing the top of a dense layer of artifacts. This deposit was observed 3 to 5 feet below the surface of the bench. The artifacts consisted of tabular and chunky pieces of Monterey chert, primarily orange to root beer colored, with smaller amounts of dark gray material. Some of the chert chunks were unmodified, but there were numerous macro flakes, cores, large bifaces, and shatter type debitage in high density within and around the exposed deposit.

While examining existing ranch access roads for the Project, a number of locations were observed on the Signorelli Ranch where shale gravel had been spread on their surface, ostensibly to improve vehicle traction. Closer inspection revealed that chert artifacts were present in these gravels, which appeared to be of local origin. Later, when attempting to determine the boundaries of LWF-5, the source of these gravels was inadvertently discovered. Approximately 250 feet northeast and above LWF-5, the terrace or bench described above was found. Since it was beyond the Project area at the time of discovery, the site was not recorded. LWF-11 was assigned more recently when design changes expanded the Project area to the vicinity of this site.

Shale gravel from LWF-11 was apparently used in the past to surface ranch roads at selected locations. However, this practice of spreading artifacts throughout the Signorelli Ranch might have the undesirable effect of creating deposits that might be mistakenly identified as archaeological sites at some future date. It would be advisable not to use the quarry as a source of gravel for future road repairs.

An examination of geologic maps of the area produced by Thomas Dibblee (1988) reveals the presence of a fairly large landslide at the location of the quarry. Further observation revealed that cultural material from LWF-11 was apparently transported down slope by the landslide into the vicinity of LWF-5. What is not clear is whether the landslide occurred before, during, or after the unrecorded prehistoric quarry was in use. It is possible that the landslide exposed chert deposits that were subsequently quarried and later partially buried beneath colluvial deposits. It is also possible that the entire quarry site was displaced from higher on the slope to a lower elevation during the landslide. A closer examination of the site by a geomorphologist would be necessary to more accurately establish the relationship between the two archaeological sites and the landslide.

The chert quarry at LWF-11 may be quite large in size and could have served as a major source of the root beer colored Monterey chert that appears at many sites within the vicinity of the Project. Its relatively undisturbed condition (since it is buried) makes it an ideal site for recovery of information on quarrying and distribution practices.

CA-SBA-2450 (Now Incorporated within the Boundaries of CA-SBA-2756)

This site, previously recorded by Osland and Berry (1991), was incorporated within the boundaries of LWF-1 (CA-SBA-2756) on the basis of surface observations during the current investigation. (See description of LWF-1.)

CA-SBA-2754 (Prehistoric with Potentially Medium Significance)

This previously recorded site (CA-SBA-2754) has dimensions of approximately 530 by 390 feet and is ovoid in shape. A low surface density of lithic artifacts was observed during the present and past investigations. These artifacts included both primary and secondary flakes, biface fragments, and shatter of orange to root beer colored Monterey chert. A projectile point fragment of Franciscan chert, as well as chalcedony and andesite flakes, were noted by earlier investigators (Parsons, 1996). The depth of the cultural deposit appears to be 2.7 feet based on the Parsons testing and earlier testing by McDowell (1994).

CA-SBA-2754 appears to have functioned as a lithic workshop or reduction area. It is located near LWF-10, which was likely the source of the chert found here. This site is assessed as having medium sensitivity because it is relatively undisturbed and has the potential, in conjunction with LWF-10, to yield information lithic production activities. A Phase 2 Archaeological Investigation would be necessary to reliably establish this potential.

CA-SBA-2757 (Prehistoric with Potentially Medium Significance)

This previously recorded site (CA-SBA-2757) has dimensions of approximately 815 by 225 feet and is roughly rounded rectangular in shape. Limited subsurface testing was previously conducted at the sites (Parsons, 1996). The Parsons Archaeological Site Record describes the site as a "light scatter of flaked lithics" including over 100 primary and secondary flakes of light brown banded Monterey chert and two early stage biface fragments. The depth of this site is unknown.

CA-SBA-2757 appears to have functioned as a lithic workshop. Because of its proximity and possible relationship to Site LWF-10, as well as its potential for yielding information on lithic production, this site is assessed as having medium sensitivity. However, a Phase 2 Archaeological Investigation would be required for an adequate evaluation of the resource.

CA-SBA-2873 (Prehistoric with Potentially High Significance)

This site (CA-SBA-2873) was originally recorded during a base wide survey of VAFB. The portion of the site located on VAFB was recently subjected to subsurface testing by Applied Earthworks (Lebow, Coleman, and Harro, 2003). The investigators did not have access to the part of the site located on private property.

CA-SBA-2873 occupies the top and slopes of a terminal southwest trending ridgeline. The dimensions from Lebow's updated site record are approximately 575 by 512 feet. The depth of the cultural deposit is recorded as approximately 68 inches. Lebow et al. describe the VAFB portion of the site as a "moderately dense scatter of flaked stone" without bones, marine shell, or archaeobotanical remains. Stone tools recovered were apparently used for "scraping, cutting, grooving, and planing tasks." They further note that tools used to work plants were prevalent. They postulate that the site functioned as a location for gathering and processing plants and other resources. They also note that SBA-2873 appears to be eligible for nomination to the National Register of Historic Places (NRHP) (Lebow, Coleman, and Harro, 2003).

Recent observations at the site provide additional information. There are a number of bedrock mortar holes within sandstone outcroppings on the Scolari portion of CA-SBA-2873. In addition, fragments of ground stone artifacts are present (handstones, manos) on the ridgeline near the VAFB boundary fence. The presence of the bedrock mortars and ground stone tend to reinforce the conclusion that the site functioned as a location for gathering and processing plants and other resources. Additionally, there are historic artifacts on the private property side including the remains of old vehicles and farm equipment. CA-SBA-2873 is considered to be highly significant based on the evaluation by Lebow, et al. and observations of the portion of the site as part of the current evaluation. Subsurface testing would only be required if the limits of project disturbance were moved closer to the site (Lebow, Coleman, and Harro, 2003).

3.6.4.2 Lompoc Wind Energy Power Line

A records and literature search was conducted for a 1-mile-wide corridor along the entire power line alignment, revealing the presence of three previously documented prehistoric sites (CA-SBA-1751, CA-SBA-2066, and CA-SBA-2465), all located either slightly within or adjacent to the centerline of the power line route.

Intensive pedestrian field survey of the power line route and at least a 100- by 100-foot pad, centered on each angle structure location, was also conducted. An architectural reconnaissance of the power line corridor was also completed in order to identify the potential presence of any historic standing structures that may qualify as historical resources under CEQA. No previously undocumented prehistoric, historic, or architectural resources were documented as a result of the field survey of the roughly 8-mile power line corridor.

A short segment of the power line corridor along the shoulder of San Miguelito Road passes through a small residential area comprised of mostly 1960s to 1980s single-story ranch and Spanish revival style homes. All are modern residential buildings and none meets any of the eligibility requirements to be considered historical resources under CEQA or NRHP.

Prehistoric archaeological sites CA-SBA-1751, CA-SBA-2066, and CA-SBA-2465 are described in greater detail below.

CA-SBA-1751 (Prehistoric with Potentially Low Significance)

This previously recorded prehistoric archaeological site (CA-SBA-1751) was documented in 1982 and consists of a light surface scatter of lithic waste. No other artifacts or features were present. The site has been heavily disturbed from modern development and agricultural activity. CA-SBA-1751 is located near, but well outside of the power line corridor, and is not expected to be impacted. No further work is recommended.

CA-SBA-2066 and CA-SBA-2465 (Prehistoric with Potentially Low Significance)

These two previously recorded sites (CA-SBA-2066 and CA-SBA-2465) are acknowledged to be a single large prehistoric lithic quarry site. The site consists of large outcrops of Monterey chert, procured prehistorically for the production of lithic tools. The site record was recently updated in 1999. This site remains unevaluated, but is tentatively assessed as having only low significance potential due to loss of integrity from the impact of highway construction through the site, modern quarrying of bedrock materials, and erosion. A Phase 2

Archaeological Investigation would be required to more reliably establish the significance of this resource.

3.6.4.3 Archaeological Isolates

Additionally, a total of 11 archaeological isolates were identified during the intensive field survey conducted for this Project. Archaeological isolates are one or two artifacts or other culturally derived items of prehistoric or early historic age located within 65 feet of each other, or at least the same distance from the boundaries of an archaeological sites. Isolates are not considered nonunique resources and do not meet any of the eligibility criteria for either the California Register of Historical Resources (CRHR) or NRHP and are, therefore, considered not significant.

3.6.5 Native American Consultation

The NAHC was contacted by letter on January 5, 2007, by CH2M HILL, requesting a search of the NAHC Sacred Lands file and information about traditional cultural properties, such as cemeteries and sacred places in the Project area. The NAHC record search of the Sacred Lands file failed to indicate the presence of Native American cultural resources in the immediate Project area. The record search conducted at the Central Coastal Information Center CHRIS also failed to indicate the presence of known Native American traditional cultural properties. Additionally, the NAHC also responded with a list of Native Americans interested in consulting on development projects. In May 2007, each of these individuals or groups was contacted by letter. No responses have been received to-date.

3.6.6 Evaluation of Results

Given the fact that 18 archaeological sites and 11 archaeological isolates were found during the current Phase 1 Investigation, the Project area is considered highly sensitive in terms of archaeological resources.

3.6.7 Regulatory Framework

3.6.7.1 Archaeological and Historic Resources

The Project falls under state legislative jurisdiction. California state law regarding cultural resources is primarily included in the CEQA Guidelines, as amended. According to CEQA, if:

... a project may affect an archaeological resource, the agency shall determine whether the effect may be a significant effect on the environment. If the project may cause damage to an important archaeological resource, the project may have a significant effect on the environment.

CEQA has established principles for preservation of for cultural resources and criteria for the identification of important resources. Section 15064.5 of the CEQA Guidelines provides definitions of significance and types of impacts to archaeological and historic resources. As cited in this section, the lead agency shall consider a resource to be "historically significant" if the resource meets the CRHR criteria for eligibility or is listed in a local historic register or deemed significant in a historical resources survey. According to CRHR criteria, a significant historic resource is one which:

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

Further, CEQA emphasizes that evaluations take into consideration a resource's historic integrity, combining location, design, setting, materials, workmanship, feeling, and association.

Additionally, historic sites are defined as "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Public Resources Code Section 5020.1).

Inventory methods for the Project area consisted of archival research, a pedestrian survey, architectural reconnaissance, and Native American consultation. Methods were consistent with the plans and policies outlined in Section 3.10.4.

3.6.8 Project Impacts, Mitigation, and Residual Impacts

3.6.8.1 Thresholds of Significance

Where a project may adversely affect a unique archaeological resource, Section 21083.2 of CEQA requires that the lead agency (that is, Santa Barbara County) treat that effect as a significant environmental impact. When an archaeological resource is listed in or eligible to be listed in the CRHP, Section 21084.1 of CEQA requires that any substantial adverse effect to that resource be considered a significant environmental impact.

Additionally, the County Environmental Thresholds and Guidelines Manual contains three elements: Historical, Ethnic, and Archaeological. The Historical Element pertains to historical structures and buildings. The Ethnic Element of the Guidelines outlines procedures and policies for identifying, evaluating, and mitigating potential impacts on archaeological resources and stipulates a variety of steps that shall be undertaken if the site is important to Native Americans and other ethnic groups. The Archaeological Element, most relevant to this project, contains a framework for developing research questions to improve the understanding of Santa Barbara County prehistory (County, 2006).

Santa Barbara County Cultural Resource Guidelines also provide direction to archaeologists on what types of research topics and research questions are appropriate to determine the significance of an archaeological site (County, 1993).

3.6.8.2 Project Impacts

The records and literature search and field survey failed to identify any known or previously unrecorded historic archaeological sites (remains of sites no longer in use or maintained, and having clearly defined archaeological potential (that is, associated artifacts, features, ecological evidence), or historic nonarchaeological sites (buildings, sites, structures,

objects, and districts that in general are still used or maintained). No impact to historic sites is anticipated. A total of 18 prehistoric archaeological sites have been documented within the Project sites.

Impact No.	Impact Description	Phase	Impact Classification
CULT-1	Construction activities could result in significant impacts to 18 prehistoric archaeological sites.	Construction and (potentially) Operations	Class II

Impact CULT-1: Known Prehistoric Archaeological Sites. A total of 18 prehistoric archaeological sites were identified during the present cultural resources evaluation. All of these sites appear to have characteristics that may qualify them as significant historical resources according to CEQA. The greatest potential for impacts to these sites would occur during the construction phase of the Project, although impacts could occur during operation and maintenance of the facilities if ground disturbance occurred. Ground-disturbing activities, including the operation of heavy equipment, could result in significant but mitigable impacts (*Class II*) to cultural resources, but impacts to individual sites cannot be precisely identified until the final locations of turbines, access roads, and other facilities are determined, and detailed engineering plans are completed. In many cases, direct impacts may be avoided through minor design modifications. Project design would incorporate measures to completely avoid as many of these sites as possible. Because the cultural resources survey methodology included inventory of a wide corridor for the explicit purpose of allowing for design flexibility, avoidance would be possible in many cases.

Impact No.	Impact Description	Phase	Impact Classification
CULT-2	Impacts to unidentified subsurface archaeological resources may occur as a result of earth-disturbing activities.	Construction	Class II

Impact CULT-2: Unidentified Archaeological Resources. Impacts to unidentified subsurface archaeological resources may occur as a result of ground-disturbing activities, including the operation of heavy equipment. If Project activities disturbed a previously undiscovered CRHR-eligible cultural resource, the impact would be significant but mitigable (*Class II*).

Impact No.	Impact Description	Phase	Impact Classification
CULT-3	Impacts to known and unidentified archaeological resources may occur as a result of increased public access to archaeological sites via new or improved roads.	Construction and Operations	Class II

Impact CULT-3: Unauthorized Artifact Collection. Archaeological sites could be exposed during construction, and workers could have increased knowledge of and access to artifacts. Additionally, long-term access to archaeological sites would be enhanced by the construction of new access roads and improvement of existing roads. Unauthorized collection of artifacts would contribute to the destruction of site integrity, which would be a significant but mitigable impact (*Class II*).

3.6.8.3 Applicant-proposed Mitigation Measures

The following Applicant-proposed mitigation measures are considered part of the project description. They have been combined and refined where appropriate to reflect the County Standard Conditions of Approval and Mitigation Measures (Santa Barbara County, 2005), including plan requirements, timing, and monitoring actions that would be required. Specific County Phase 2 archaeological survey requirements also are addressed.

Mitigation Measure A-CULT-1: Additional Archaeological Surveys. If it is determined that a Project element requiring ground disturbance cannot be located at least 100 feet from the mapped boundaries of an archaeological site, a new Phase 1 survey of that specific location shall be conducted. If this survey confirms that ground disturbance would occur within 100 feet of a site boundary, then an Extended Phase 1 investigation shall be conducted by employing a small number of shovel test units (STU). These STUs would be used to determine the actual subsurface boundary of the archaeological site relative to the proposed disturbance, and therefore verify whether or not the site would be affected by the disturbance. The STUs should be 20 inches in diameter and excavated in arbitrary 8-inch levels.

If the presence of cultural materials is confirmed in areas that would be disturbed by Project construction, then Phase 2 subsurface testing shall be conducted to evaluate the nature, extent, and significance of the cultural resources. This evaluation program shall be designed to assess each archaeological site consistent with County Archaeological Guidelines and shall involve the following:

- a. Controlled hand excavation and surface collection of a representative sample of the site deposit determined by a County-approved archaeologist
- b. A detailed analysis of the material recovered
- c. An assessment of cultural resource integrity
- d. Preparation of a final report with recommendations for impact mitigation if necessary.

Should this program determine that the affected archaeological sites are significant, Phase 3 mitigation in the form of data recovery excavation shall be implemented consistent with County Archaeological Guidelines.

Plan Requirements and Timing: All work shall be funded by the Applicant. The scope of work for the study(s) shall be prepared by the County or by the County- approved archaeologist and reviewed by the County. The study(s) shall be performed prior to final design so that any necessary modifications can be incorporated into the plans. The County-approved archaeologist shall submit a final report to the County detailing the results of the study(s) prior to zoning clearance. Any subsequent modifications resulting from the study(s) shall be incorporated into the final plans and be subject to review and approval by the County prior to zoning clearance for the first phase of construction and prior to zoning clearances for subsequent project phases.

MONITORING: The County will review results of study, determine the course of action, and ensure that approved recommendations are carried out (*Addresses Impact CULT-1*).

Mitigation Measure A-CULT-2: Archaeological Isolates. In the case where ground disturbance is proposed within 30 feet of Archaeological Isolates LWF Iso-1, Iso-8, Iso-9, Iso-10, and Iso-11, a single STU shall be excavated within 3 feet of the isolate in order to determine if there are subsurface deposits present. If the isolate cannot be relocated, the STU shall be placed in the general vicinity of its mapped location. If subsurface cultural deposits are identified, they shall be assessed and characterized in accordance with Mitigation Measure A-CULT-1.

Plan Requirements and Timing: The Applicant shall fund the above referenced study. The scope of work for the study shall be prepared and accepted by the County in consultation with a County- approved archaeologist. The findings of the study shall be submitted to the County to determine if additional protective measures shall be required. The study shall be performed prior to the zoning clearance for the first phase of construction and prior to the zoning clearances for subsequent Project phases for disturbance in this area.

MONITORING: The County will review results of study and determine course of action (*Addresses Impact CULT-1*).

Mitigation Measure A-CULT-3: Road Preparation. Where existing graded ranch roads pass through an archaeological site, such roads may be used and widened through the site area by surfacing them with a 6-inch layer of imported gravel or soil that is free of cultural materials and recognizably different from the site soils. Surfacing the road with gravel shall also occur for a distance of 100 feet beyond the mapped boundary of a site, except in cases where the boundary has been established through subsurface testing. Gravel from site LWF-111 shall not be used for this purpose because it contains cultural material.

Plan Requirements and Timing: The required data collection program shall be conducted by a County- approved archaeologist and funded by the Applicant. The results of the program shall be reviewed and approved by the County prior to the zoning clearance for the first phase of construction and prior to the zoning clearances for subsequent Project phases. All recommendations in the report shall be implemented as approved.

MONITORING: County staff will review the program and ensure that approved recommendations are carried out in the field (*Addresses Impact CULT-1*).

Mitigation Measure A-CULT-4: Unanticipated Discoveries. Should human remains, historic or prehistoric artifacts, or other potentially important cultural materials be unearthed or otherwise discovered at any time during activities associated with the development of the Project area, work in the immediate vicinity of the discovery shall be suspended until a County- approved archaeologist and Native American representative are retained by the Applicant to evaluate the significance of the find pursuant to Phase 2 investigations as specified in the County Guidelines (County, 1993). If the cultural resources are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with County Cultural Resource Guidelines and funded by the Applicant. In the event that suspected human remains are discovered, the County Coroner shall be contacted in accordance with state law.

Plan Requirements and Timing: This condition shall be printed on all building and grading plans prior to zoning clearance for the first phase of construction and prior to zoning clearances for subsequent project phases.

MONITORING: The County will check plans prior to zoning clearance for the first phase of construction and prior to zoning clearances for subsequent phases to confirm that this measure is printed on the plans and shall spot check that this measure is noted on the plans in the field (*Addresses Impact CULT-2*).

Mitigation Measure A-CULT-5: Archaeological and Native American Monitors. A County-approved archaeologist and Native American monitor shall monitor ground disturbances in all areas containing known archaeological materials to ensure that any previously unidentified cultural resources are recorded.

Plan Requirements and Timing: Prior to start of construction, a contract or Letter of Commitment between the Applicant and the County-approved archaeologist, consisting of a project description and scope of work, shall be prepared. The contract shall be executed and submitted to the County for review and approval prior to the issuance of the zoning clearance for the first phase of construction and prior to the issuance of the zoning clearances for subsequent project phases.

MONITORING: County staff will confirm monitoring by the County-approved archaeologist and County grading inspectors will spot check field work (*Addresses Impacts CULT-1 and CULT-2*).

Mitigation Measure A-CULT-6: Pre-construction Workshop. The County shall conduct a pre-construction workshop with cultural resource specialists, Native American monitors, and construction workers and personnel, stressing the importance of cultural resources and discussing penalties for their illicit disturbance.

Plan Requirements and Timing: Training shall occur prior to commencement of any construction-related activity and all construction personnel must receive training. The Applicant shall keep training records onsite for review by the County, if requested.

MONITORING: The County will review the training material prior to any trainings, spot check construction staff to ensure compliance with this requirement, and request training attendance records, if determined necessary (*Addresses Impact CULT-3*).

3.6.8.4 Additional Mitigation Measures

The following additional mitigation measures shall be implemented, in addition to the Applicant-proposed mitigation measures listed above, to provide adequate protections for cultural resources.

Mitigation Measure CULT-1: Avoidance of Cultural Resources. Avoidance of cultural resource sites is the preferred measure, and all impacts to CRHR eligible sites shall be avoided to the greatest extent possible.

Plan Requirements and Timing: As Project design plans are being finalized, the County and its qualified archaeologist shall review 1 inch to 400 feet (1":400') or better scale orthotopo maps of the areas of known Project impacts and provide an assessment of direct adverse effects to CRHR-eligible or unevaluated cultural resources. Recommendations for plan adjustments to avoid all eligible resources to the extent feasible shall be made and design adjustments may be necessary. Final Project layout (for example, WTG placement, access road alignment, power pole locations, and staging areas) shall include measures to

avoid eligible sites where feasible. All work shall be completed as part of final design, and any necessary modifications shall be incorporated into the final plans. The County shall confirm that this measure has been conducted prior to zoning clearance for the first phase of construction and prior to zoning clearance for subsequent Project phases.

MONITORING: County will shall check plans prior to zoning clearances and shall spot check in the field during ground disturbing activities (*Addresses Impact CULT-1*).

Mitigation Measure CULT-2: Final Plan Notification. The Applicant shall include a note on a separate informational sheet to be recorded with the final plans for each construction phase designating the known archaeological sites as unbuildable areas, unless the archaeological site is formally evaluated by a County- approved archaeologist as ineligible for the CRHR or a Phase 3 data recovery program has been implemented. The areas shall not be identified as archaeological sites on the informational sheet.

Plan Requirements and Timing: The informational sheet shall be submitted prior to zoning clearance for the first phase of construction and prior to zoning clearance for subsequent Project phases.

MONITORING: The County will spot check to ensure compliance (*Addresses Impact CULT-1*).

Mitigation Measure CULT-3: Temporary Fencing. Known unevaluated or determined significant archaeological sites and 50-foot buffer areas shall be temporarily fenced with chain link flagged with color or other material authorized by the County where ground disturbance is proposed within 100 feet of the site and a buffer.

Plan Requirements and Timing: The fencing requirement shall be shown on approved grading and building plans. Plans are to be approved prior to zoning clearance for the first phase of construction and prior to zoning clearances for subsequent project phases; and fencing is to be in place prior to start of construction. The areas shall not be identified as archaeological sites on the informational sheet.

MONITORING: County staff will verify installation of fencing by reviewing photo documentation or by site inspection prior to prior to zoning clearances and ensure fencing in place throughout grading and construction through site inspections (*Addresses Impact CULT-1*).

3.6.8.5 Residual Impacts

With implementation of the Applicant-proposed mitigation measures and additional mitigation measures outlined above, residual impacts to cultural resources would be less than significant.