7.0 CULTURAL RESOURCES

7.1 INTRODUCTION

This chapter describes the existing cultural resources within, and in the vicinity of, Pacific Gas and Electric Company's Windsor Substation Project area and evaluates the potential cultural resource impacts associated with project construction and operation. PG&E's Best Management Practices (BMP's) include avoidance and protection measures described in Section 7.6 Avoidance and Protection Measures that will ensure that impacts to cultural resources as a result of construction and operation of the project will be less than significant.

Paleontological resources are discussed in Chapter 8.0: Geology, soils, and Mineral Resources and Paleontology.

7.2 METHODOLOGY

Methods used to assess the project's potential impacts to cultural resources consisted of pre-field archival research, consultation with Native American groups and individuals as well as with local historical societies, and an archaeological survey. A summary of the region's prehistory, history, and ethnography is also provided as context within which the potential impacts are analyzed.

7.2.1 Records Search

Prior to fieldwork, Far Western Anthropological Research Group, Inc. (Far Western) requested a search be conducted of materials on file at the Northwest Information Center of the California Historical Resources Information System (NWIC) for the area in and within a one-quarter-mile radius of the project.

Specialized listings that were consulted include the *Historic Properties Directory* for Sonoma County, which includes the most recent updates of the National Register of Historic Places (NRHP), California Historical Landmarks, and California Points of Historical Interest, as well as evaluations of properties reviewed by the State of California Office of Historic Preservation. The *California Inventory of Historic Resources* was also reviewed, as were local inventories, lists, and historic maps.

Letters were also sent to three local historical societies in an effort to gather additional information concerning the project area. These letters were sent on January 14, 2009, to the Sonoma County Historical Society, the Northwestern Pacific Railroad Historical Society, and the Windsor Historical Society. Additional letters were mailed to the three groups on July 9, 2009, that described the planned reconductoring associated with the project. There have been no responses received as of July, 2009.

7.2.2 Native American Consultation

The Native American Heritage Commission (NAHC) was consulted for a review of the Sacred Lands Inventory for the project area. In the response letter, the NAHC noted that no Native American cultural resources were listed in their files. Far Western subsequently contacted the 13 Native American individuals listed by the NAHC who may have knowledge of cultural resources in the project area. A map of the proposed project area was provided to all individuals. Contact was initiated with letters followed by telephone calls and/or emails. Project updates were mailed in July, 2009, to those individuals who did not specifically request they be excluded from further consultations. As of July, 2009, only two written responses had been received. Both responses requested that consultations be continued as the project moves forward. Copies of the letters sent and received are contained in Attachment D: Native American Consultation.

Nick Tipon, Chairman of the Sacred Sites Protection Committee for the Federated Indians of Graton Rancheria, noted that the project location may be located on prehistoric site(s) or on traditional gathering areas. He did not provide any specific information concerning the project area or indicate any previous usage by his tribe. He expressed two requests: that additional consultation is carried out with the lead agency regarding the project's projected disturbances, and that a review of culturally sensitive plants in the project area is provided. Mr. Tipon also expressed concern about the potential for buried cultural resources in the project area and indicated that the project may require a "subsurface archaeological survey and consultation with Tribe prior to our comments during the review process."

Four letters were sent to members of the Lytton Band of Pomo Indians. During a follow-up phone call to the tribe's chairperson, Margie Mejia, Far Western was instructed not to contact any other members of the tribe. In accordance with her instructions, no follow-up phone calls were made or project updates mailed to the three other members identified in the Native American Heritage Commission list. Brenda Tomaras of Tomaras & Ogas, LLP, was subsequently contacted by Lytton Rancheria (Tribe) and asked to represent them. She emailed a letter to the author that stated that, although the Tribe had no specific information concerning the project area, it believes that the project falls within traditional Southern Pomo territory and is within ten miles of the Tribe's historic reservation. As such, the Tribe believes there is a potential for inadvertent discoveries of cultural resources during ground-disturbing activities. On behalf of the Tribe, Ms. Tomaras then requested that special care be taken to protect such resources should they be inadvertently discovered and that they are contacted immediately should any other Pomo sites or human remains encountered during the archaeological survey. The letter also states that the Tribe requests that they have the opportunity to review and provide comments on the cultural survey document when it is completed. Ms. Tomaras responded to the July project update letter with an emailed letter containing recommendations for mitigation measures. These measures included cessation of construction activities if cultural resources are exposed until the finds can be assessed by a qualified archaeologist and a culturally affiliated tribal representative, and the Coroner be contacted immediately if human remains are exposed.

Two others declined further involvement with this project. The Cloverdale Rancheria of Pomo Indians and Dawn S. Getchell both indicated that the project lies outside of their area(s) of concern.

There have been no other responses as of April 15, 2010.

7.2.3 Archaeological Survey

An archaeological field inventory of the project area was undertaken by an archaeologist meeting the standards of the Secretary of the Interior. The project area was surveyed in accordance with standard archaeological practices for central California and utilized transect intervals no greater than 30 meters.

7.3 REGULATORY BACKGROUND

The regulatory framework that mandates consideration of cultural resources in project planning includes federal, state, and local governments. Cultural resources include prehistoric and historic archaeological sites, districts, and objects; standing historic structures, buildings, districts, and objects; and locations of important historic events or sites of traditional and/or cultural importance to various groups. Cultural resources may be determined significant or potentially significant in terms of national, state, or local criteria either individually or in combination. Resource evaluation criteria are determined by the compliance requirements of a specific project.

7.3.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires a review to determine if the project will have a significant effect on archaeological sites or properties of historic or cultural significance to a community or ethnic group eligible for inclusion in the California Register of Historic Resources (CRHR). The CRHR (Section 5024.1) is a listing of those properties that are to be protected from substantial adverse change, and it includes properties that are listed, or have been formally determined to be eligible for listing in, the NRHP, State Historical Landmarks, and eligible Points of Historical Interest. A historical resource may be listed in the CRHR if it meets one or more of the following criteria:

- it is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- it is associated with the lives of persons important to local, California, or national history;
- it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- it has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

7.3.2 Historical Resources

Public Resources Code (PRC) Section 21084.1 stipulates that any resource listed in, or eligible for listing in, the CRHR is presumed to be historically or culturally significant. Resources listed in a local historic register or deemed significant in a historical resource survey (as provided under PRC Section 5024.1g) are presumed historically or culturally significant unless the preponderance of evidence demonstrates they are not. A resource that is not listed in or

determined to be eligible for listing in the CRHR, not included in a local register or historic resources, or not deemed significant in a historical resource survey, may nonetheless be historically significant (PRC Section 21084.1). This provision is intended to give the Lead Agency discretion to determine that a resource of historic significance exists where none had been identified before and to apply the requirements of PRC Section 21084.1 to properties that have not previously been formally recognized as historic.

CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (PRC Section 21084.1) and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance (PRC Section 5020.1).

7.3.3 Archaeological Resources

Where a project may adversely affect a unique archaeological resource, PRC Section 21083.2 requires the Lead Agency to treat that effect as a significant environmental effect. When an archaeological resource is listed in or is eligible to be listed in the CRHR, PRC Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. PRC Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may have a potential adverse effect on archaeological resources.

7.3.4 Other California Laws and Regulations

Other state-level requirements for cultural resources management appear in the California PRC Chapter 1.7, Section 5097.5 "Archaeological, Paleontological, and Historical Sites," and Chapter 1.75 beginning at Section 5097.9 "Native American Historical, Cultural, and Sacred Sites" for lands owned by the state or a state agency.

The disposition of Native American burials is governed by Section 7050.5 of the California Health and Safety Code and Sections 5097.94 and 5097.98 of the PRC, and falls within the jurisdiction of the NAHC.

7.4 EXISTING CONDITIONS

The project is within an area formerly used for agricultural purposes that is being developed for mixed residential, light industrial and recreational purposes.

The substation site is currently an open lot. The proposed substation parcel is bounded to the north by Mitchell Lane, a paved two-lane road, to the west by the Northwestern Pacific Railroad, and is just north of a seasonal stream. A narrow, approximately 10-meter-wide corridor lies between the west side of the railroad easement and a paved bike lane off of Eagle Drive. The area west of Eagle Drive is a residential development.

The associated distribution lines follow existing roadways (Mitchell Lane, Conde Lane, and Hembree Lane) and cross Highway 101. There are residential and retail buildings along its corridor, anchored by the Shiloh shopping center at its south end. The lines cross Highway 101 at its northernmost point. The lines also cross Pool Creek.

7.4.1 Archaeological Overview

The project lies within the North Coast Ranges area, which has been the focus of fewer archaeological studies in comparison to the San Francisco Bay and Sacramento-San Joaquin Delta regions to the south. Work conducted during the early half of the twentieth century in those regions helped to establish a chronological framework that influenced subsequent research in the North Coast Ranges. This chronology was divided into three broad time periods: Paleoindian, the three-stage Archaic period, and the Emergent period.

7.4.1.1 Paleoindian Period (ca. 10,000-6000 B.C.)

There have been very few occupations in California firmly dated to the terminal Pleistocene and Early Holocene. This is due in part to the low archaeological visibility assumed to be characteristic of the population of this period, which probably consisted of small, highly mobile groups. As recent geoarchaeological investigations have indicated, the remains of these groups were also subject to destruction or burial by alluvial sediments deposited during the later Holocene. In some areas, Late Pleistocene landforms may be encountered at or near the surface, but they are generally located in areas that would have attracted only limited human use anyway.

Sites possibly dating to this early period have been identified along Laguna de Santa Rosa, along the Mendocino County coast and Bodega Head, and in Lake County near Clear Lake and Cache Creek.

7.4.1.2 Archaic Period (6000 BC - AD 500)

7.4.1.2.1 Lower Archaic Period (6000-3000 BC)

As the climate warmed and grew wetter at the end of the Pleistocene, significant amounts of alluvium were deposited in the Central Valley and elsewhere in California. This process is evident in clear stratigraphic boundaries between sediments from the Late Pleistocene and Holocene throughout central California.

Several sites in the region have been dated to this period and typically contain tools and debris consistent with a mobile hunting and gathering economy. The similarities in the archaeological assemblages of these sites are referred to as the Borax Lake Pattern of occupation. This pattern is evident in sites across a variety of settings in northwest California, including Humboldt and Trinity counties, the mountains of Mendocino County, and in the Clear Lake Basin as well as Santa Rosa and Duncan's Landing on the Sonoma Coast.

A contrasting economic pattern was also evident during this period in the Clear Lake region. As opposed to the residentially mobile Borax Lake Pattern, the Berkeley Pattern at Clear Lake

provided the first evidence of more stable, long-term settlements. Acorn use accelerated during the ensuing Middle Archaic, as Berkeley Pattern sites became widespread across the region.

7.4.1.2.2 Middle Archaic Period (3000-1000 BC)

The onset of the Middle Holocene, roughly corresponding to the Middle Archaic, was marked by significant climatic changes during which warmer and drier conditions led to desiccation of lake basins in southern California. Initially, central California experienced increased alluvial deposition on fans and floodplains but soon entered a period of stability. Across California there is a general decrease in the numbers of sites dating to this interval.

In northwestern California, the Borax Lake Pattern of highly mobile foraging was replaced with a more localized foraging strategy. These Mendocino Pattern sites typically contain less obsidian flaked stone material from far-flung sources and greater representations of more locally available toolstone, such as chert in the Santa Rosa area. Mendocino Pattern sites are well-represented on the Santa Rosa Plain.

The Middle Archaic was marked by new ground stone technology as well as increased regional trade as evidenced by cut marine shell (*Olivella* sp.) beads within mortuary contexts. Mortars and pestles first appeared in Middle Archaic sites in the Bay Area and are thought to signal an increased dietary reliance on acorns and a concomitant increase in sedentism. By 1000 BC, it was thought that more sedentary Berkeley Pattern groups practicing a collecting economic strategy began to spread into the Santa Rosa region while in-place mobile Mendocino Pattern foragers focused on the uplands.

7.4.1.2.3 Upper Archaic (1000 BC - AD 500)

Climatic changes during the onset of the Upper Archaic apparently resulted in more favorable cool and wet conditions for human occupation. Sites dating to this period demonstrate marked differences in their constituents relative to previous occupations. These occupations are ascribed to the Berkeley Pattern, which appears to have originated in the Clear Lake area during the Lower Archaic. This pattern is characterized by a higher degree of sedentism and intensive use of acorns, large terrestrial game, and fish, as well as elaborations in bone tool technology. There appears to have been an expansion in site settlements; for example, new areas became occupied at Bodega Bay. Most researchers attribute these changes to the expansion of Pomoan populations from a Clear Lake homeland, presumably replacing earlier Yukian-speaking peoples. In Napa Valley, rich midden sites developed during this time. Berkeley Pattern sites have also been identified in Alexander Valley, the Dry Creek and Geysers area, and in Clear Lake Basin.

The onset of the Upper Archaic was also marked by an evident change in "symbolic integration systems" experienced widely across California, including the Bay Area, Central Valley, and southern California. This change was manifested by the abrupt replacement of rectangular shell beads, used over the preceding 3,000 years, with split-beveled and tiny saucer *Olivella* beads. Additional new decorative forms soon followed, including bone and circular abalone ornaments.

7.4.1.3 Emergent (AD 500- 1500)

Inception of the Lower Emergent Period was originally thought to date to AD 500 but more recent work suggests the timing of this event may not have occurred until later, perhaps around AD 1000.

The onset of the Upper Emergent Period coincides with the arrival of the Spanish explorers in the New World (ca. 1500) and the lifeways practiced by Native people during this period are thought to be similar to those observed by the early non-native chroniclers. This period is also characterized by unsettled climatic events which occurred over much of the western United States.

The Emergent Period is thought to be associated with a new level of sedentism, status ascription, and ceremonial integration in lowland central California. New ornament forms and technology, including the bow and arrow, define the Augustine Pattern. There appears to have been a diversity of socioeconomic strategies associated with Augustine Pattern sites in the North Bay, with some sites revealing a continuance of sedentary systems initiated by the Berkeley Pattern and others apparently resulting from mobile adaptations.

Similar to the previous interval, this period was marked by wide-ranging changes in *Olivella* bead forms and distribution patterns. The *Olivella* saucer bead trade network appears to have abruptly collapsed between AD 430 and 1050 and more regional ornamentation styles seem to have been favored, possibly indicating the increased importance of communicating cultural affiliation within an increasingly populous region. It is during this time period that there was the first evidence of inland manufacture of *Olivella* wall beads, including the Santa Rosa Plain. Clamshell disk beads are evident in many North Bay archaeological sites at about AD 1550 and new technological innovations are also present in this area during this time, including the toggle harpoon and hopper mortar.

7.4.2 Ethnographic Overview

The project lies within the area inhabited by the Southern Pomo, whose ethnographic territory extended about 45 miles north from around Santa Rosa to the Sonoma-Mendocino border and from the eastern drainage of the Russian River west to its boundary with the Kashaya (Pomo), with a narrow extension between them to the coast up to Gualala. Central Pomo groups bordered the Southern Pomo territory to the north, Wappo to the east, and Coastal Miwoks groups were to the south. Southern Pomo people occupied the lower half of the Russian River with two exceptions: its mouth, which was within Kashaya (Pomo) territory to the west, and the area between the towns of Geyserville and Healdsburg, which was held by the Wappo. It is thought that this latter area was wrested from the Southern Pomo by the Wappo prior to arrival of Euroamericans. Southern Pomo tribelets include *Kataictemi*, north of Santa Rosa, *Bitakomtara*, who occupied the area from Santa Rosa to Cotati, and *Konhomtara* near Sebastopol.

Southern Pomo groups maintained a relatively dense population with complex social structures. They had access to diverse resources and scheduled their subsistence activities according to the seasonal availability of critical harvests. They typically lived in large villages with ancillary smaller villages for most of the year and dispersed into seasonal camps to exploit variable resources. Their settlements were focused on the inland valleys near the Russian River and larger creeks. Their structures were built of brush and grass or tule supported by wooden poles tied together at the top. Larger, semi-subterranean structures were constructed as sweathouses or dancehouses. The ethnohistoric settlement of *Tsolika'wi*, which roughly translates to "at redwing (blackbird) field" was reportedly located in East Windsor, although its location remains undetermined.

Pomo groups relied heavily on acorns for their subsistence, and would gather and store them to eat throughout the year. The high level of effort required to process the acorns prior to consumption is reflected in their associated technology and practices. Other plants were utilized, including buckeye nuts, berries, grasses seeds, roots, bulbs, and edible greens. Food obtained from the coast included dried seaweed and kelp as well as fish, especially salmon and steelhead, and sea mammals. Large game, such as deer, elk, and antelope were important dietary constituents. Small game, such as rabbits and squirrels, were also taken, as were many varieties of birds, including waterfowl. Bones from a variety of fish, birds, and mammals have been recovered from archaeological sites in the region. Trade with neighboring groups was an important way to augment their diet and acquire exotic items, and Pomo people were specialists in the production of clamshell disk beads and magnesite cylinders.

The indigenous patterns of Pomo peoples were irrevocably changed with the arrival of Euroamericans in California. Following the founding of Mission Dolores and the Presidio in San Francisco, the Spanish began raiding the Southern Pomo territory for potential converts. By the 1820s at least 600 Pomo had been baptized at missions San Rafael and Sonoma. Native populations were also affected by the diseases introduced during contact with the Euroamerican newcomers.

Despite the twin effects of disease and removal under the reservation system, some traditional Pomo occupations persisted in the region. Gradually, these people became incorporated into the capitalist wage system although their traditional ways have not disappeared, as is evident in the region's Pomo rancherias.

7.4.3 Historic Overview

7.4.3.1 Hispanic and Russian Periods

The first recorded overland Spanish expedition into present-day Sonoma County took place in 1810 under the leadership of Gabriel Moraga. Moraga's goal was to establish a Spanish presence north of San Francisco Bay to strengthen Spain's territorial interests against Russian incursions along the Sonoma Coast. The Russian outpost of Fort Ross was established by the Russian-American Company just two years later along the coast as a regional base for its fur-trading venture. For nearly three decades, the Company employed an ethnically diverse workforce, including local Pomo people, until the declines in sea otters, and their pelts, made the colony unprofitable and the operation was abandoned.

After Mexico achieved its independence from Spain in 1821, it began a more aggressive colonizing effort in northern California to assert its territorial claims against Russia. In 1823, Mission San Francisco Solano was established in the town of Sonoma, the 21st and last of the Spanish/Mexican missions built in California. Sonoma soon became the focus of settlement for the Mexican colonists as their attempts to settle in what are now the towns of Fulton, Petaluma,

and Santa Rosa met failure due to resistance by local Native American groups. This resistance would ultimately collapse when diseases introduced by the Euroamerican colonists devastated Native populations.

Beginning in 1833, the landholdings of the missions were broken up and distributed to individuals. Large tracts of land ended up in the hands of Mexican colonists, including Euroamericans who married into Californio families. Much of modern Sonoma County was ultimately carved up into 27 land grants of which the largest, Petaluma, was owned by Mariano Guadalupe Vallejo. His rancho's operation, like most of the period, was focused on the trade of hides and tallow to foreign traders. Many Native Americans were employed by Vallejo, including Southern Pomos.

The project is located on land not within any of these land grants. It is situated just east of the northeast boundary of two land grants, Sotoyome and Molinos. No known features, dwellings, roads, corrals, or other structures associated with the ranchos are within or adjacent to the project area.

7.4.3.2 American Period

Two major events occurred in California during the relatively short, five-year-span between 1845 and 1850. The first was the culmination of tensions between Californios and American immigrants that was the Mexican-American War, which ended with the signing of the Treaty of Guadalupe Hidalgo in early 1848. This treaty ceded California to the United States.

Just one year after the treaty was signed, gold was discovered in the Sierra Nevada foothills, sparking the second major event of the period. Would-be argonauts poured into California from all over the world. Many local residents joined the stampede and abandoned their farms.

When California was entered into statehood in 1850, Sonoma was one of the original 27 counties. At that time, its population was concentrated in only a few settlements, with the former pueblo of Sonoma the largest. Other population centers in the region were the Petaluma adobe, Bodega, and a few other ranchos. As the gold fields became played out, residents returned to Sonoma County along with many others who decided to stay in California. Many of these newcomers "squatted" on the extensive tracts of land held by land-grantees, which were generally used for cattle grazing. Some violent encounters resulted from disputes between squatters and landowners. Many of these landowners were overwhelmed by the numbers of squatters and simply sold off their holdings. The newcomers set up farms and focused on commercial agriculture, with wheat and potatoes as the preferred crops.

The area surrounding what is now the town of Windsor was settled by these early farmers after 1851. Settler R.T. Mitchell, who owned the project area by 1864, arrived in 1852 or 1853. The town itself was formally established in 1855 and its businesses were centered in what is now East Windsor. Construction of a narrow-gauge railroad in 1872 connected the Russian River region to San Francisco and opened up new opportunities for agricultural commerce, particularly for fruit growers. As a result, the town's business center shifted westward to the rail corridor. The region's economy was primarily based on agricultural endeavors throughout most of its history,

with wine grapes, hops, and prunes as the dominant crops during the twentieth century. Transportation into the region was also enhanced by the construction of the 14-mile-long Old Redwood Highway between Healdsburg and Santa Rosa in 1915 and later by Highway 101, which was constructed between Santa Rosa and Windsor in 1962. By the 1980s, commercial and residential development blossomed across the region along its major highways and its agricultural base declined somewhat in importance.

7.4.4 Cultural Resources in the Study Area

No prehistoric or ethnographic sites have been recorded in or adjacent to the project area. No prehistoric cultural materials were identified during fieldwork.

A single historic-era cultural resource was previously documented within the project area although it has since been destroyed and very few traces of it were visible during the field survey.

No local, state, or federal historically or architecturally significant structures, landmarks, or points of interest have been recorded or identified in or adjacent to the project.

7.4.4.1 Records Search Results

The records search results (NWIC File Nos. 08-0829 and 09-0020) indicated that eight studies have been conducted within portions of the project area, the latest of which was conducted in 2002. Twenty-one others were conducted within 0.25 mile of the project area.

During the 2002 study, a historic-era agricultural complex was recorded within the proposed substation locale. This resource, P-49-2875, consisted of a residence and associated barns and other outbuildings. It was not evaluated for listing to the National Register. The site record provides little detail but notes that the complex functioned as a horse facility when it was recorded in 2002. All documented buildings and activity areas associated with this resource are entirely within the project area east of the railroad corridor. The occupants of the residence in 2002 indicated that some of the buildings were over 100 years old and that the owner of the property after the turn of the twentieth century was the Wilson family, who built the road fronting the property (then called Wilson Lane but later renamed Mitchell Lane). The residence itself dated to the 1930s. Historical maps indicated that buildings were present on the property in 1864. Topographic maps for 1940, 1955, and 1993 all depict standing structures where the agricultural complex recorded as P-49-2875 was situated, with an apparent expansion between 1955 and 1993. Most of the complex's buildings were situated on the parcel of land immediately east of the project site; only three structures (the Main Barn, Pole Barn, and Mobile Home) were located within the proposed substation site construction area. The remaining structures, including the residence and the water well, were all located immediately east of the project site.

"Thomas Mitchell's Stable and House" is depicted within this project area on the 1864 and 1868 General Land Office plats for this area. These structures are located approximately where the 2002 farm complex was situated. Historical maps from 1877 and 1898 maps indicate that Robert T. Mitchell owned the project area as part of a 320 acre parcel; the current Northwestern Pacific Railroad (NWPRR) alignment is also depicted on these maps. Ownership of the parcel changed hands by 1908, with Emma C. Wilson noted as the owner. The county surveyor's map for 1934 indicates the parcel was owned by E. C. Wilson.

Aerial photographs of the project area indicate it was apparently used for boarding and training horses by 1952; row crops were present in the general vicinity to the northwest and northeast. The structures were still present in a 2005 aerial photograph, indicating that demolition and grading occurred sometime afterward.

No structures or other resources are evident on historical maps within the narrow portion of the project area west of the railroad corridor.

Only two other previously recorded resources are within a distance of 0.25 mile of the project area. Both are 1950s-era single family residences that were evaluated not eligible for listing in the National Register of Historic Places as well as the California Register of Historical Resources.

7.4.4.2 Archaeological Survey Results

Historic-era resource P-49-2875 was previously recorded within the proposed substation site, although very little evidence of it was observed during the survey. There were no foundations present, nor were any artifacts noted. Some small chunks of concrete rubble were widely scattered across the general area, and there were some bare patches of ground lacking vegetation where the buildings were approximately located. Nearly all of the project area has been mechanically graded and it's unlikely any natural ground surface is retained east of the railroad corridor. That portion of the project area within the narrow strip west of the railroad has not been similarly graded and probably retains its natural surface but has probably been extensively disturbed (landscaping with underground sprinklers and an underground gas pipeline marker are present).

7.4.4.3 Archaeological Sites in the Study Area

A single cultural resource is reported within the project area. This resource, P-49-2875, was a working horse boarding facility with a residence and various outbuildings when it was recorded in 2002. The complex has since been destroyed with very little evidence remaining. It is unlikely that any associated intact subsurface deposits remain based on the field survey.

7.4.5 Unknown Cultural Resources in the Study Area

There is a low potential for subsurface deposits in the project area.

There appears to be a low potential for inadvertent discoveries of buried prehistoric archaeological deposits during subsurface construction within the project area based on a review of the area's geology and soils. The soils within the project area, all Huichica series, likely date to the Late Pleistocene and have not been subject to widespread Holocene-era alluvial deposition that could bury cultural materials. There are no meanders of Pool Creek situated within the project area, and its soil type indicates the creek alignment has remained stable through time, with no migration of the channel that would potentially bury surface materials. While such migrations are more likely further downstream, the project's distribution lines cross an upper portion of Pool Creek that appears to have been stable. Perennial streams such as Pool Creek would have attracted prehistoric human occupation, but evidence of such within this upper portion of the creek should be visible on its surface. Although the likelihood is low, there is a slight chance that archaeological deposits may be exposed during subsurface construction.

There is a low potential for historic-era deposits associated with resource P-49-2875 within the substation project area. These subsurface deposits, if they were ever present, were probably disturbed or destroyed when the buildings were removed and the surface graded after 2005. If subsurface cultural materials associated with this resource are present, they are more likely to exist on the parcel to the east of the proposed substation parcel where most of the historic buildings were actually located. There is less likelihood of subsurface cultural materials where the proposed substation is to be constructed, although the potential still exists.

Although the likelihood is low, any archaeological deposits exposed during subsurface construction could contain potentially significant buried prehistoric and/or historic cultural materials. Should subsurface cultural resources be encountered, PG&E's BMPs will be carried out.

7.5 IMPACTS

No impacts to significant recorded cultural resources are anticipated for the project and there is a low potential for presence of subsurface cultural materials.

7.5.1 Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Impacts to cultural resources may be considered significant if they were to:

- cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA guidelines;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA guidelines; and/or
- disturb any human remains, including those interred outside of formal cemeteries.

The single identified historical resource, P-49-2875, appears destroyed and no identifiable features or other intact remains are present. Therefore, no impacts to significant recorded cultural resources are anticipated for the project either during construction or operation.

7.5.2 Construction

Although the potential for the presence of subsurface cultural resources is low, ground-disturbing construction activities associated with construction of the proposed substation still have the

potential to directly disturb surface and subsurface cultural resources in the project area. Disturbance could result from grading and excavation at the proposed substation site, including site preparation; trenching for both underground cable placement and underground utility connections; excavation associated with the power line pole placement; pole-assembly areas; pole erection; and any other activities associated with placing the power line interconnection in service that involve ground disturbance. This disturbance could result in the loss of integrity of cultural deposits, loss of information, and the alteration of a site setting. Potential indirect impacts, primarily vandalism, could result from increased access to and use of the general area during construction. There is also the potential for inadvertent discoveries of buried archaeological materials during construction. These impacts will be reduced to less than significant with implementation of the avoidance and protection measures listed in Section 7.6 Avoidance and Protection Measures.

7.5.3 Operations and Maintenance

No impacts are anticipated from operation of the proposed substation.

7.6 AVOIDANCE AND PROTECTION MEASURES

PG&E will implement avoidance and protection measures to ensure that impacts to any cultural resources discovered during construction are less than significant. They include:

- Prior to the initiation of construction or ground-disturbing activities, PG&E will train all construction personnel to understand the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Training will inform all construction personnel of the anticipated procedures that will be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains and their treatment.
- Upon discovery of possible buried cultural materials (including potential Native American skeletal remains), work in the immediate area of the find will be halted and PG&E's archaeologist will be notified. Once the find has been identified and evaluated, PG&E's archaeologist will make the necessary plans for treatment of the find(s) and mitigation of impacts if the finds are found to be significant according to CEQA. State law will be followed in the event of the exposure of Native American skeletal remains.
- In the event human remains are encountered during the project, work in the immediate area of the find will be halted and the County Coroner will be notified immediately. Work will remain suspended until the Coroner can assess the remains. In the event the remains are determined to be prehistoric in origin, the Coroner will notify the Native American Heritage Commission, who will then identify a Most Likely Descendent. The Most Likely Descendent will consult with PG&E's archaeologist to determine further treatment of the remains.

7.7 REFERENCES

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