

3.5 - Cultural and Tribal Cultural Resources

3.5.1 - Introduction

This section describes existing cultural and Tribal Cultural Resources (TCRs) in the region and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to cultural and tribal resources that could result from implementation of the project. Information included in this section is based, in part, on a 2015 Cultural Resources Survey for The Ranch Project prepared by Tom Origer & Associates, a 2017 Cultural Resources Inventory and Evaluation Report prepared by ECORP Consulting, updated Northwest Information Center (NWIC) results, Native American Heritage Commission (NAHC) correspondence, and the City of Antioch General Plan and General Plan Environmental Impact Report (EIR). All reports and correspondence are available in Appendix E.

The following comments were received during the EIR scoping period related to cultural and tribal cultural resources:

- Recommendations for consultation with Native American tribes consistent with Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18).

3.5.2 - Environmental Setting

Cultural Resources Components

The term “cultural resources” encompasses historic, archaeological, and TCRs as well as burial sites. Below is a brief summary of each component:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State’s history and are generally less than 200 years old, but older than 50 years old.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Tribal Cultural Resources:** TCRs include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred.

Overall Cultural Setting

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available;

rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.^{1,2,3,4,5,6}

Prehistoric and Ethnographic Background

In general, archaeological research in the greater San Francisco Bay Area (Bay Area) has focused on coastal areas, where large shell mounds were relatively easily identified on the landscape. This research and its chronological framework, however, is relevant to and has a bearing on our understanding of prehistory in areas adjacent to the Bay Area, including modern Contra Costa County.

The Bay Area supported a dense population of hunter-gatherers over thousands of years, leaving a rich a varied archaeological record. The Bay Area was a place of incredible language diversity, with seven languages spoken at the time of Spanish settlement in 1776. The diverse ecosystem of the Bay and surrounding lands supported an average of three to five persons per square mile, but reached 11 persons per square mile in the North Bay. At the time of Spanish contact, the people of the Bay Area were organized into local tribelets that defended fixed territories under independent leaders. Typically, individual Bay Area tribelets included 200 to 400 people distributed among three to five semi-permanent villages, within territories measuring approximately 10.00 to 12.00 miles in diameter.⁷

Native American occupation and use of the greater Bay Area, including the regions comprising modern Walnut Creek and Pleasant Hill, extended over 5,000 to 7,000 years and may be longer. Early archaeological investigations in Central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area. The initial archaeological reports typically contained descriptive narratives with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on a variation of intersite assemblages. Research during the 1930s identified temporal periods in Central California prehistory and provided an initial chronological sequence. In 1939, researcher Jeremiah Lillard of Sacramento Junior College noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in Central California.⁸ In the late 1940s and early 1950s, researcher Richard Beardsley of the University of California Berkeley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession.⁹

¹ Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, D.C. Smithsonian Institution.

² Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.

³ Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. Berkeley: University of California Anthropological Records 9(4):295-338.

⁴ Chertkoff J.L. and K.K. Chertkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.

⁵ Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

⁶ Jones, T.L. and Kathryn A. Klar. 2007. California Prehistory. Lanham: AltaMira Press; Rowman & Littlefield Publishers, Inc.

⁷ Milliken, Randall et.al. 2007. Punctuated Culture Change in the San Francisco Bay Area, In Prehistoric California: Colonization, Culture, and Complexity, edited by T.L. Jones and K.A. Klar, 99–124. AltaMira Press.

⁸ Lillard, J.B. and W.K. Purves. 1936. The Archaeology of the Deer Creek-Cosumnes Area, Sacramento Co., California. Sacramento. Sacramento Junior College, Department of Anthropology Bulletin 1.

⁹ Beardsley, R.K. 1948. Cultural Sequences in Central California Archaeology. American Antiquity 14:1–28.

To address some of the flaws in the CCTS system, Fredrickson (1973) introduced a revision that incorporated a system of spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (12000 to 8000 years Before Present [BP]); Lower, Middle and Upper Archaic (8000 to 1500 BP), and Emergent (Upper and Lower, 1500 to 250 BP). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence.¹⁰ In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmill Pattern or Early Horizon (4500 to 3500 BP)
- Berkeley Pattern or Middle Horizon (3500 to 1500 BP)
- Augustine Pattern or Late Horizon (1500 to 250 BP)

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmill Pattern or Early Horizon (4500 to 3500 BP)

Characterized by the Windmill Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species.¹¹ Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicate an extensive trade network that may represent the arrival of Utian populations into Central California. Also indicative of this period are rectangular Haliotis and Olivella shell beads, and charmstones that usually were perforated.¹²

Berkeley Pattern or Middle Horizon (3500 to 1500 BP)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, Heizer, and Fenenga, the practice of spreading ground ochre over the burial was common at this time. Grave goods during this period are generally sparse and

¹⁰ Fredrickson, D.A. 1973. Early Cultures of the North Coast of the North Coast Ranges, California. PhD dissertation.

¹¹ Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.

¹² Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.

typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual.¹³ During this period, larger populations are suggested by the number and depth of sites compared with the Windmill Pattern. According to Fredrickson, the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.¹⁴

Augustine Pattern or Late Horizon (1500 to 250 BP)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. According to Moratto, burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation.¹⁵ Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.¹⁶

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations. Although debate continues over a single model or sequence for California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

The Bay Miwok

The Bay Area consisted of several independent tribal territories during the prehistoric and early historic periods. Native Peoples largely spoke dialects of five distinct languages: Costanoan (Ohlone), Bay Miwok, Plains Miwok, Patwin, and Wappo. The project site lies at intersection of several of these groups at different periods in time, however it was largely within the ethnographic and historic boundaries of Bay Miwok speakers, who occupied the eastern portions of Contra Costa County, from Walnut Creek east to the Sacramento-San Joaquin Delta, including the northern slopes of Mount Diablo. Several bands of Miwok are associated with the area, the closest being the Saclan, whose territory extended through the hills east of present-day Rossmoor, Lafayette, Moraga, and Walnut Creek.

¹³ Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2.

¹⁴ Fredrickson, D.A. 1973. Early Cultures of the North Coast of the North Coast Ranges, California. PhD dissertation.

¹⁵ Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

¹⁶ Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, Arizona.

The foremost political unit of the Miwok was the tribelet; an independent and sovereign nation with defined boundaries and control over the natural resources within those boundaries. As noted by Levy, villages are described as headquarters of a localized patrilineage, and this social organization was further prescribed by individual lineage memberships in a moiety. With the notable exceptions of tobacco and dogs, the Eastern Miwok largely lacked cultivated plants or domesticated animals.¹⁷

All plant foods were naturally occurring and gathered by hand, the most important of which were the seven varieties of acorn used by the Eastern Miwok people. Acorns were usually allowed to ripen and fall off the tree on their own where they would then be collected in large numbers in burden baskets. The acorns were then shelled, placed on an acorn anvil, and struck with a hammer stone to expose the meats within. These meats were ground into a fine meal using a bedrock mortar and cobblestone pestle. The meal was then sifted into a tightly coiled basket, and several applications of water were run through the basket to leach the bitter tannin from the meal. Once dry, the meal could be used in the preparation of acorn soup, mush, biscuits, and bread. For this reason, access to acorns; clean, moving water; and exposed bedrock was particularly important to the Eastern Miwok. These resources were available in the general project area.

Watercourses were often a focus of prehistoric occupation in Central California with Native American groups exploiting a variety of ecological niches. While this area was within an environmentally advantageous area for Native Americans located between the resources of the San Francisco Bay margin and the foothills and nearby creeks, no ethnographic settlements are known to have been located within or adjacent to the project site. Prehistoric site types recorded in the general Pleasant Hill area consist of lithic scatters, quarries, habitation sites (including burials), bedrock mortars or other milling feature sites, petroglyph sites, and isolated burial sites. However, none of these resources or the habitation mounds mapped by Whitney in 1873 or recorded by Nels C. Nelson in 1912 are located on or near the project site.

Regional Historic Background

Spanish Period

The Eastern Miwok were first contacted by the Spanish exploring expeditions of the Sacramento-San Joaquin Valley in the second part of the 18th century. The first Spanish expeditions through the project site were led by Captain Pedro Fages and Father Juan Crespi in 1772. Juan Bautista de Anza also led an expedition in 1776. Expedition campsites have been mapped in the vicinity of Interstate 680, State Route 242, and Willow Pass Road. According to Hart, Spanish colonial policy from 1769-1821 was directed at the founding of presidios, missions, and secular towns, with the land held by the Crown. The depletion of the coastal populations resulted in Spanish missionaries shifting to conversion of the interior peoples. The Bay Miwok were the first of the Eastern Miwok to be missionized, and were generally not willing converts. Mission baptismal records show that Native Americans went to Mission San Francisco de Assisi, founded in 1776, and Mission San Jose, founded in 1797. Their traditional lifeways apparently disappeared by 1810 due to disruption by Euro American diseases, a declining birth rate, and the impact of the mission system. For the most part, the former hunters-gatherers were

¹⁷ Levy, R. 1978. Costanoan. In California, edited by Robert F. Heizer, pp. 485–495. Handbook of North American Indians, Vol. 8. W.G. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

transformed into agricultural laborers and worked with former neighboring groups such as the Esselen, Yokuts, and Miwok. After secularization of the missions between 1834 and 1836, some Native Americans returned to traditional religious and subsistence practices while others labored on Mexican ranchos. Thus, multi-ethnic Native American communities grew up in and around the area and provided informant testimony to ethnologists from 1878 to 1933.¹⁸

Mexican Period

The Mexican Period, 1821 to 1848, was marked by secularization and division of mission lands among the *Californios* as land grants, termed ranchos. During this period, Mariano G. Vallejo assumed authority of Sonoma Mission and established a rapport with the Native Americans who were living there. In particular, Vallejo worked closely with Chief Solano, a Patwin who served as Vallejo's spokesperson when problems with Native American tribes arose. The large rancho lands often were worked by Native Americans who were used as forced labor.

Shoup and Milliken state that mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos.¹⁹ Following mission secularization, the Mexican population grew as the Native American population continued to decline. Euro-American settlers began to arrive in California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of California was 8,000 non-natives and 10,000 Native Americans. However, these estimates have been debated. Cook suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.²⁰

Gold Rush and American Expansion Period

In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the gold rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire State. By late 1848, approximately four out of five men in California were gold miners. The California Gold Rush originated along the reaches of the American River and other tributaries to the Sacramento River, and Hangtown, present-day Placerville, became the closest town offering mining supplies and other necessities for the miners in El Dorado County. Gold subsequently was found in the tributaries to the San Joaquin River, which flowed north to join the Sacramento River in the great Delta east of San Francisco Bay.²¹

By 1864, California's Gold Rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the California Gold Rush, people in towns such as Jackson, Placerville, and Sonora

¹⁸ Hart, J.D. 1987. *A Companion to California* (New edition, revised and expanded). University of California Press, Berkeley, California.

¹⁹ Shoup, L.H., and R.T. Milliken. 1999. *Inigo of Rancho Posolmi: The Life and Times of a Mission Indian*. Novato, CA. Ballena Press.

²⁰ Cook, S.F. 1976. *The Population of the California Indians 1769–1970*. University of California Press. Berkeley, California.

²¹ Robinson, W.W. 1948. *Land in California*. Berkeley, CA: University of California Press. Cook, S.F. 1976. *The Population of the California Indians 1769–1970*. University of California Press. Berkeley, California.

turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains.²²

History of the City of Antioch

The City of Antioch was established by William Wiggin Smith and Joseph Horton Smith—twin brothers from Maine who arrived in California in July 1849—who were carpenters by trade as well as ordained ministers. Seeking a new life out West, the two brought their families and began working as carpenters at the New York of the Pacific (now the City of Pittsburg, approximately 4.50 miles west of Antioch). Dr. John Marsh offered the brothers two quarter-sections of land located on his Los Maganos Rancho.

The brothers continued to work at the New York of the Pacific while maintaining their newly acquired land, which they had named Smith's Landing. Eventually, the brothers established a restaurant and hotel called the New York House, primarily used by miners and other travelers heading east during the California Gold Rush. In February of 1850, Joseph died of malaria, leaving his brother with both quarter sections of land.

In summer 1851, William Smith received word that a ship of New Englanders landing in San Francisco were looking to establish a colony on the west coast. Eager to attract people onto his land, William met the group of colonists in San Francisco and offered them parcels on which to build homes and create a community. Approximately half of the colonists accepted the offer, while several others headed east to strike it rich in the gold-bearing areas of the Sierra foothills. The name of Antioch was finally chosen for the new community at the 1851 Fourth of July picnic held at William Smith's house. It was named after biblical city of Antioch in Syria. Over the years, Antioch slowly grew with the local grazing, agriculture, and mining industries and remained a key city within Contra Costa County.

Coal was discovered in 1859 in the hills south of Antioch by William Israel. Coal formed the first substantial industry aside from farming and dairying in the region. Coal mining towns south of Antioch began to form in the 1860s as coal veins were discovered. Coal provided a readily available source of energy needed to fuel foundries, mills, ferries, steamers, and other developing industries in the Bay Area. Noah Norton opened the Black Diamond Mine, located below Mount Diablo, and the town of Nortonville in 1861. The Black Diamond Mines District included the settlement of Judsonville. The contribution of the Black Diamond Mines to the development of industry and bulk transportation to the San Francisco Bay Area can be said to have had a significant effect on the whole development of California industry and commerce as a whole by providing a reliable and inexpensive fuel. Four million tons of coal were extracted from the Mount Diablo Coalfields during its history. The coal extracted from the Mount Diablo Coalfields was a soft, bituminous, low-quality coal. When a harder, higher-quality coal, anthracite, was discovered in Washington and Oregon in 1902, the Mount Diablo Coalfield mines and towns were abandoned.

²² Beck, Warren A., and Y.D. Haase. 1974. *Historical Atlas of California* (Third Printing 1977). University of Oklahoma Press, Norman, Oklahoma.

Until around 1960, Contra Costa County had the highest population along the shoreline of San Francisco and Suisun bays. The valleys of Central Contra Costa County remained dominated by farming and ranching. Prior to the San Francisco-Oakland Bay Bridge opening in 1936 and the Caldecott Tunnel opening in 1937, residential commuter suburbs in the eastern Bay Area did not exist. After World War I, residential commuter suburbs began to expand around late nineteenth-century communities. From these communities came the towns and cities that make up Contra Costa County today. Dramatic growth in population for central and east Contra Costa County has continued since the 1970s.

3.5.3 - Methodology and Results

Two prior Cultural Resource Studies, each consisting of a records search, pedestrian survey, testing and evaluation of existing cultural resources for the project site were conducted by Tom Origer & Associates in 2015, and by ECORP in 2017.²³ Given that the records search data was over 2 years old, FCS conducted updated records searches in 2019, the results of which are detailed below.

Updated Records Searches to Identify Existing Cultural Resources

Northwest Information Center

On June 13, 2019, FCS conducted an updated records search at the NWIC. According to the records search conducted for the proposed project, two previously recorded historical-era cultural resources are present on the property (P-07-000008 and P-07-000010). P-07-000008, the Judsonville town site, and P-07-000010, the ranch complex, were recorded in 1990 and 1994 by William Self Associates^{24,25} and evaluated by ECORP in 2017. In total, 13 previous studies have been conducted within a 0.5-mile radius of the project site and three include the project site. Table 3.5-1 lists the recorded cultural resources within 0.5-mile of the project site, and Table 3.5-2 lists previous investigations within 0.5-mile of the project site.

Table 3.5-1: Recorded Cultural Resources within 0.5-mile Radius of Project Site

Resource No.	Resource Name/Description	Date Recorded
P-07-000008	Judsonville Site/Historic site	1993
P-07-000009	Historic Site, location of a former school house associated with the Judsonville town	1993
P-07-000010	Ranch complex/Historic site	1993
P-07-000011	Historic District/townsite and mining-related features	1993

Source: NWIC Records Search. June 13, 2019.

²³ Fuerstenberg, T. and M. Webb 2017a. Test Program Results and Evaluation for Cultural Resources in The Ranch in Antioch Project, Contra Costa County, California (ECORP).

²⁴ William Self Associates, Inc. 1990. Cultural Resources Assessment report for Lone Tree Valley Feasibility Study, Contra costa County, California. Document S-13420 on file at the Northwest Information Center, Rohnert Park.

²⁵ William Self Associates, Inc. 1994. Archaeological Survey Report, Future Urban Area 1, Antioch, Contra Costa County, California. Document S-16916 on file at the Northwest Information Center, Rohnert Park.

Table 3.5-2: Previous Investigations within a 0.5-mile Radius of the Project Site

Report No.	Report Title/Project Focus	Author	Date
S-9776	Parcels “A” and “B” North American Development Corporation	David Chavez	1988
S-011826	Montezuma I and II Cultural Resources	Dorothea J. Theodoratus, et. al.	1980
S-016916	Archaeological Survey Report, Future Urban Area 1, Antioch, Contra Costa County, California	Ann Samuelson, Carolyn Rice, and William Self Associates	1994
S-006927	Archaeological Reconnaissance of the Horse Valley Estates, Contra Costa County, California	Suzanne Baker	1984
S-010509	Class III Intensive Archaeological Field Reconnaissance of the Kellogg Reformulation Unit, Highline Canal Alternative, Contra Costa and Alameda Counties	Peter M. Jensen, Alfred Farber, and Neal Neuenschwander	1986
S-020481	Cultural Resources Assessment, Roddy Ranch Golf Course Project, Antioch, Contra Costa County, California	Carrie D. Wills	1998
S-020635	Cultural Resources Assessment Report, Horse Valley and Adjoining Lands, Contra Costa County, California	William Self Associates	1998
S-023349	Archival Literature Search and On-Site Archaeological Surface Reconnaissance of an Approximately 20 Acre Parcel of Land, Located Near the Intersection of Dallas Ranch Road and Mount Hamilton Drive, City of Antioch, Contra Costa County, California	Allen G. Pastron	1994
S-029930	Request for SHPO Review of FCC Undertaking, Black Diamond Mine/CA-2786C, Antioch City Water Tank, Empire Mine Road, Antioch.	Lorna Billat	2005
S-035237	New Tower (“NT”) Submission Packet FCC Form 620, Metro PCS, Black Diamond, SF-19000A	Lorna Billat	2008
S-036781	Cultural Resources Records Search Results for T-Mobile USA Condidate [sic] BA21252 (Kaiser Antioch), 4501 Sand Creek Road Antioch, Contra Costa County, California	Wayne Bonner	2009
S-044221	A Cultural Resources Survey for the Aviano Farms Development near Antioch, Contra Costa County, California	Virginia Hagensieker Janine M. Origer	2013
S-049302	Phase I Cultural Resources Evaluation for the Black Diamond Mines Regional Preserve Trails Expansion Project, Contra Costa County, California	Juliana Quist and Allen G. Pastron	2017

Source: NWIC Records Search. June 13, 2019.

Non-confidential NWIC Records Search Results may be found in Appendix E-2.

Native American Heritage Commission Record Search

In July of 2015, Tom Origer & Associates contacted the NAHC in order to determine whether any sacred sites or TCRs are listed on its Sacred Lands File for the project site. The NAHC responded with negative results. At the recommendation of the NAHC, Tom Origer & Associates reached out to Katherine Erolinda Perez of the Ohlone Indian Tribe, and the Trina Marine Ruano for additional information about the project site but did not receive a response.

In compliance with SB 18 (defined in Government Code § 65300 *et seq.* and in Government Code § 65450 *et seq.*), a project notification letter was distributed to the Native American Contacts provided by the NAHC who may have knowledge of Native American cultural resources in the immediate project area. The letters were distributed on October 16, 2017, explaining the nature of the project and soliciting comments and any additional information the individuals might have regarding cultural resources in the project area. To date, none of the tribes have responded. In addition, FCS sent out SB 18 letters to tribal representatives on December 20, 2019. No responses have been received to date.

In 2018, the City of Antioch sent notification letters by mail pursuant to AB 52 as part of the previous EIR. In June 2019, FCS contacted the NAHC to determine whether any sacred sites had been added to the project site or within 0.5-mile. A response was received on June 13, 2019, indicating that the Sacred Lands File failed to indicate the presence of Native American cultural resources on-site or in areas adjacent to the project site. The NAHC included a list of eight tribal representatives available for consultation. FCS assisted the City of Antioch in drafting notification letters including a project description and map that were sent to all tribal representatives on August 29, 2019, pursuant to AB 52. Consultation is ongoing; however, no tribes have responded to date.

Cultural Resources Pedestrian Surveys and Field Testing

A field survey was conducted on July 14, 2015, by Tom Origer & Associates for the project site. Flatter portions of the site were examined by walking in transects approximately 30 meters wide, using a zig-zag pattern to assure complete coverage. Steeper portions of the site were inspected by walking widely spaced transects while searching for archaeologically sensitive locations (e.g. flats, springs, rock outcrops, historic features). Hoes were used to clear small patches of vegetation, as needed, so the ground could be inspected throughout the project site. Subsurface soils were inspected where burrowing animals had deposited spoils. Visibility was good in most of the area.

No prehistoric materials were found within the project site. Given the good ground visibility within the majority of the project site and the lack of prehistoric site indicators found, it is unlikely that prehistoric resources are present. However, the project site contains two historic-era sites: the Judsonville town site (P-07-000008) and the ranch complex (P-07-000010).

The Judsonville town site (P-07-000008), is the location of the former 19th-century coalfield community that contains a well pit, a depression with historic-era glass, a large ovular depression with historical

material, and a hand dug cave. The cave was previously documented by William Self Associates, Inc.²⁶ as being associated with the site, but it was outside the current property boundary. In addition to the artifacts noted in the “ovular depression,” a variety of historical materials was noted on the surface of the site. The site record has been updated to expand the limits of the sites to include an additional depression containing historical-era glass fragments on the surface. The community of Judsonville is associated with the Empire Mine^{27,28} which represents an important period in the economic development of the area.

The ranch complex (P-07-000010), was built post-1939 (based on aerial photographs) and is currently a working ranch. There are two sheds on-site, in addition to a modular home with two accompanying sheds, a raised chicken coop, and aviary. Also found on-site are two barns, one of which currently houses machinery, a concrete foundation with a water spigot, a former well, a brick square with an opening in the center, and a circular depression. A wooden bridge that spans Sand Creek is located west of the barn. A debris pile of burned wood, metal sheets and barbed wire is just north of the bridge. The chicken coops were built by the current resident or her father, and are thus, modern. Many of the recent additions to the property were made by the current resident and her father.

The Cultural Resources Survey prepared by Tom Origer & Associates recommended archaeological test excavations to better define the boundaries of both historic sites and aid in the evaluation of both for eligibility to the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP). In 2017, archaeological test excavations by the ECORP field team attempted to clarify the depth and nature of cultural deposits of the Judsonville town site boundaries.

In one of the two small depressions, excavation yielded historic artifacts to a depth of 60 centimeters. The finds reflected domestic and architectural uses. Combining the results of the test excavations and archival research guided by a townsite research design, the report’s authors concluded that site P-07-000008 (Judsonville) is eligible for the NRHP as an individual resource and as a contributing resource of the Black Diamond Mines Historic District under Criterion A for its association with 19th century coal mining in California. The authors also assessed eligibility under Criterion D for the site’s demonstrated ability to yield important information regarding historic townsite establishment and evolution, as well as for commercial behavior and domestic behavior themes. As the townsite is eligible for the NRHP, it is automatically eligible for the CRHR.

The ECORP field team also conducted test excavations at the ranch complex, P-07-000010. Back in 1993, William Self Associates assessed the ranch complex buildings as not eligible for the NRHP or CRHR. However, no record of concurrence from the State Historic Preservation Officer could be located. Nonetheless, ECORP staff concurred with the earlier William Self Associates assessment. As the ranch complex also included historic archaeological deposits and features, the test excavations conducted by the ECORP field team yielded information relevant to several research domains: household composition

²⁶ William Self Associates, Inc. 1994. Archaeological Survey Report, Future Urban Area 1, Antioch, Contra Costa County, California. Document S-16916 on file at the Northwest Information Center, Rohnert Park.

²⁷ Parent, T., and K. Terhune. 2009. Black Diamond Mines Regional Preserve: Images of America. Arcadia Publishing.

²⁸ William Self Associates, Inc. 1994. Archaeological Survey Report, Future Urban Area 1, Antioch, Contra Costa County, California. Document S-16916 on file at the Northwest Information Center, Rohnert Park.

and lifeways; economic strategies and; site structure and land use patterns. The authors concluded that even though the historic site is an active, working ranch, Locus 1 (original settlement) of the ranch complex is eligible for the NRHP under Criterion D because of its archaeological information potential and therefore, automatically eligible for the CRHR under Criterion 4.

Copies of both reports are confidential and not subject to public disclosure in order to protect the resources.

Summary of Existing Cultural Resources at the Project Site

Historic Architectural Resources

Based on the Cultural Resources Survey prepared by Tom Origer & Associates and ECORP, two known historic resources are located within the project site boundaries. As described previously, the project site contained two historic-era sites, the Judsonville town site (P-07-000008) and Locus 1 of the ranch complex (P-07-000010).

Archaeological Resources

No known archaeological sites or burial sites are located within the project site boundaries. However, as noted in Table 3.5-1, two known resources are located within 0.5-mile of the project site in addition to the two known historic sites within the project site boundaries. Archaeological resources are often obscured from view and can be uncovered during construction activities.

Tribal Cultural Resources

No TCRs have been recorded within the project site, and none have been identified through a search of the NAHC Sacred Lands File and subsequent outreach to Native American representatives conducted pursuant to AB 52. Correspondence with the NAHC and Tribal Representative may be found in Appendix E.

3.5.4 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the NRHP, which contains an inventory of the nation's significant prehistoric and historic properties. Under 36 Code of Federal Regulations 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and requires special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of ARPA is to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include, but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be

presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code), does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR.

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code Section 5024.1. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

Public Resources Code 5024.1(c)—Definition of Historically Significant

CEQA Guidelines Section 15064.5(a)(3)(A)-(D), in Title 14 of the California Code of Regulations, also defines as resource as "historically significant" if the resource:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine if they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be an historical resource but meets the definition of a “unique archeological resource” as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific interest of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); Public Resources Code [PRC] § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the county coroner must be contacted. If the county coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project Applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendent communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

Health and Safety Code Section 7050.5

Section 7050.5 of the Health and Safety code sets forth provisions related to the treatment of human remains. As the code states, “every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor”²⁹ except under circumstances as provided in Section 5097.99 of the Public Resources Code, which provides guidelines for the treatment of human remains found in locations other than a dedicated cemetery including responsibilities of the coroner.

Public Resources Code Section 5097.98

Section 5097.98 provides protocol for the discovery and treatment of human remains. It states that “when the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify persons believed to be most likely descended from the deceased Native American.”³⁰ It also sets forth provisions for descendants’ preferences for treatment of the human remains and what should be done if the commission is unable to identify a descendant.

California Assembly Bill 52—Effects on Tribal Cultural Resources

AB 52 was signed into law on September 25, 2014, and provides that any public or private “project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” TCRs include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources.” Under prior law, TCRs were typically addressed under the umbrella of “cultural resources,” as discussed above. AB 52 formally added the category of “tribal cultural resources” to CEQA, and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to general plan or specific plan amendments.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures may include:

- Preservation in place
- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria.

²⁹ California Legislative Information. 2019. Health and Safety Code—HSC. Website: http://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=7050.5. July 12, 2019

³⁰ Find Law. 2019. California Code, Public Resources Code—PRC § 5097.98. Website: <https://codes.findlaw.com/ca/public-resources-code/prc-sect-5097-98.html>. Accessed July 12, 2019.

Local

City of Antioch General Plan

Resource Management Element

- **Objective 10.9.1:** Preserve archaeological, paleontological, and historic resources within the Antioch Planning Area for the benefit and education of future residents.
- **Policy 10.9.2a:** Require new development to analyze and therefore avoid or mitigate impacts to archaeological, paleontological, and historic resources. Require surveys for projects having the potential to impact archaeological, paleontological, or historic resources. If significant resources are found to be present, provide mitigation in accordance with applicable CEQA guidelines and provisions of the California Public Resources Code.
- **Policy 10.9.2b:** If avoidance and/or preservation in the location of any potentially significant cultural resources is not possible, the following measures shall be initiated for each impacted site:
 - A participant-observer from the appropriate Indian Band or Tribe shall be used during archaeological testing or excavation in the project site.
 - Prior to the issuance of a grading permit for the project, the project proponent shall develop a test-level research design detailing how the cultural resource investigation shall be executed and providing specific research questions that shall be addressed through the excavation program. In particular, the testing program shall characterize the site constituents, horizontal and vertical extent, and if possible, period of use. The testing program shall also address the California Register and National Register eligibility of the cultural resource and make recommendations as to the suitability of the resource for listing on either Register. The research design shall be submitted to the City of Antioch for review and comment. For sites determined, through the Testing Program, to be ineligible for listing on either the California or National Register, execution of the Testing Program will suffice as mitigation of project impacts to this resource.
 - After approval of the research design and prior to the issuance of a grading permit, the project proponent shall complete the excavation program as specified in the research design. The results of this excavation program shall be presented in a technical report that follows the City's outline for Archaeological Testing. The Test Level Report shall be submitted to the City for review and comment. If cultural resources that would be affected by the project are found ineligible for listing on the California or National Register, test-level investigations will have depleted the scientific value of the sites and the project can proceed.
 - If the resource is identified as being potentially eligible for either the California or National register and project designs cannot be altered to avoid impacting the site, a Treatment Program to mitigate potential project effects shall be initiated. A Treatment Plan detailing the objectives of the Treatment Plan shall contain specific, testable hypotheses relative to the sites under study and shall attempt to address the potential of the sites to address these research questions. The treatment Plan shall be submitted to the City for review and comment.
 - After approval of the Treatment Plan, the Treatment Plan for affected, eligible sites shall be initiated. Typically, a Treatment Program involves excavation of a statistically representative sample of the site to preserve those resource values that qualify the site as being eligible for the California or National Register. At the conclusion of the excavation or research program,

the Treatment Report shall be developed. This data recovery report shall be submitted to the City for review and comment.

- **Policy 10.9.2c:** When existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate reposition, and file a report with the Community Development Department documenting any paleontological resources found during site grading.
- **Policy 10.9.2d:** As a standard condition of approval for new development projects, require that if unanticipated cultural or paleontological resources are encountered during grading, alteration of earth materials in the vicinity of the find be halted until a qualified expert has evaluated the find and recorded identified cultural resources.
- **Policy 10.9.20e:** Preserve historic structures and ensure that alterations to historic buildings and their immediate settings are compatible with the character of the structure and surrounding neighborhood.

3.5.5 - Impacts and Mitigation Measures

The section below evaluates the proposed project’s potential to impact cultural resources. Determinations of impacts to cultural resources were based on information from the Cultural Resources Survey prepared by Tom Origer & Associates, and the Test Program Results report and Cultural Resource Inventory report prepared by ECORP, and updated records searches and consultation performed by FCS. Mitigation measures are identified, as necessary.

Significance Criteria

According to 2019 CEQA Guidelines Appendix G, to determine whether impacts related to cultural resources are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

- a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?
- d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
- e) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object

with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Approach to Analysis

This evaluation focuses on whether the proposed project would impact historic, archaeological, or TCRs.

The historic resources impact analysis is based on information collected from record searches at the NWIC, additional archival research, pedestrian surveys, and information from a historic architectural assessment of existing properties more than 45 years in age located within the project boundaries. The archeological and human remains impact analysis is based on information collected from record searches at the NWIC, the NAHC, additional archival research, pedestrian surveys, and outreach to Native American representatives identified by the NAHC as potentially having an interest in or additional information on the project site.

Both direct and indirect effects of project implementation were considered for this analysis. Direct impacts are typically associated with construction and/or ground-disturbing activities, and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of archaeological resources and/or historic architecture. Indirect impacts are typically associated with post-project implementation conditions that have the potential to alter or diminish the historical setting of a cultural resource (generally historic architecture) by introducing visual intrusions on existing historical structures that are considered undesirable.

Impacts Evaluation

Historic Resources

Impact CUL-1: The project could cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

Construction/Operation

Prehistoric or historic Native American cultural resources were not identified in the project site. However, as previously discussed, two historical resources are located within the project site: P-07-000008, Judsonville town site; and P-07-000010, the ranch complex. Under Section 15064.5 of the CEQA Guidelines, a resource is considered “historically significant” if the resource meets one or more of the CRHR criteria outlined in the Regulatory Context section above. A resource must be considered historically significant and possess “integrity” in order to qualify for listing in the NRHP and CRHR.

The 2017 ECORP assessment found both the Judsonville town site and Locus 1 of the ranch complex to be significant historic resources per CEQA Guidelines Section 15064.5. Thus, the proposed project has the potential to impact known resources on-site and to encounter previously unknown buried resources. Therefore, the proposed project could have a significant impact related to damaging or destroying such a historic cultural resource. However, implementation of Mitigation Measure (MM) CUL-1 would reduce impacts to a less than significant level by ensuring the historic resources are preserved to the maximum extent possible and not impaired.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures**MM CUL-1 Avoid and Preserve in Place Existing Cultural Resources**

Historic Resources P-07-000008 and Locus 1 of site P-07-000010 are eligible historic resources that shall be avoided during project construction and preserved in-place. Prior to tentative map approval and the issue of grading permits, if development of the proposed project would occur in areas identified as containing portions of site P-07-000008 and/or Locus 1 of site P-07-000010, and the sites cannot be avoided or preserved, the City, the United States Army Corps of Engineers (USACE), and an Archaeologist meeting the Secretary of the Interior’s professional standards for historical archaeology shall coordinate as necessary to determine the appropriate course of action, which could include data recovery, scientific analysis, and professional museum curation of material.

Prior to grading, the Applicant shall hire a qualified Archaeologist to determine the existing boundaries of each historic site and mark the boundaries of each site with protective Environmentally Sensitive Area (ESA) fencing. Any project related ground disturbance occurring within 50 feet of the established boundary of either site shall be monitored by the Archaeologist.

Level of Significance After Mitigation

Less Than Significant

Archaeological Resources

Impact CUL-2: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Construction/Operation

As previously mentioned, the Judsonville town site and Locus 1 are known on-site historical resources that contain artifacts. The proposed project would include mass grading and soil disturbance in the areas that contain artifacts, and areas that may contain previously unknown buried artifacts. Therefore, construction and development activities related to the proposed project could cause a substantial adverse change in the significance of unique archaeological or paleontological resources.

The 2017 ECORP testing program demonstrated substantial subsurface deposits exist at each of the historic sites identified within the project site, as discussed above, and also determined the boundaries and extent of each deposit. A potential exists for subsurface historic-period archaeological deposits beyond the established boundaries of the sites and elsewhere in the project site. Due to the presence of alluvium along Sand Creek, and given the likelihood of prehistoric archaeological sites located along perennial waterways, a potential exists for buried prehistoric archaeological sites in the project site.

Because artifacts have been found on-site, and because the potential exists for previously undiscovered resources to be unearthed and potentially damaged or destroyed during construction of the site impacts to archaeological resources could be potentially significant. However, implementation of MM CUL-2 would ensure impacts would be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

MM CUL-2 Stop Construction Upon Encountering Archeological Materials

In the event that subsurface archeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, animal bone, obsidian and/or mortars are discovered during earth-moving activities, all work within 100 feet of the resource shall be halted, and the Applicant shall consult with a qualified Archeologist. Representatives of the City and the qualified Archeologist shall coordinate to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation.

If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives.

If a Native American archeological, ethnographic, or a spiritual resource is discovered, all identification and treatment shall be conducted by qualified Archeologists who are certified by the Society of Professional Archeologists and/or meet the federal standards as stated in the Code of Federal Regulations (36 Code of Federal Regulations [CFR] Part 61), and are Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.

In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archeological sites are involved, all identified treatment is to be carried out by qualified historical Archeologists, who shall meet Register of Professional Archeologists or 36 Code of Regulations Part 61 requirements.

The Applicant shall retain the services of a professional Archaeologist to educate the construction crew that will be conducting grading and excavation at the project site. The education shall consist of an introduction to the geology of the project site and the kinds of archeological and/or Native American resources that may be encountered, as well as what to do in case of a discovery.

Level of Significance After Mitigation

Less Than Significant

Human Remains

Impact CUL-3: The project could disturb human remains, including those interred outside of formal cemeteries.

Construction/Operation

The proposed project would include mass grading and soil disturbance in the areas that contain artifacts, and areas that may contain previously unknown buried human remains. Known human cemeteries or burials have not been detected through subsurface excavation or field surveys. However, there is always the possibility that subsurface construction activities associated with the project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. This represents a potentially significant impact related to human remains.

In the unlikely event human remains are discovered, implementation of MM CUL-3 would require that work is halted and the County Coroner is called to make a determination as to the nature of the remains and to confirm next steps regarding contacting the NAHC and appropriate tribal representatives. In addition, in the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5(d)—Effects on Human Remains, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 must be followed. Requirements of these regulations are described above in Regulatory Setting. Therefore, with implementation of MM CUL-3 and compliance with aforementioned CEQA Guidelines, direct and indirect impacts related to disturbance of human remains would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures**MM CUL-3 Stop Construction Upon Encountering Human Remains**

If during the course of construction activities there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the

recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
- The descendant identified fails to make a recommendation.
- The landowner or his or her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Level of Significance After Mitigation

Less Than Significant

Listed or Eligible Tribal Cultural Resources

Impact CUL-4: The project could cause a substantial adverse change in the significance of a Tribal Cultural Resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

Construction/Operation

In compliance with AB 52 and SB 18, notification letters were distributed to representatives of the Native American tribes that have expressed interest in development projects in the City and may have additional information regarding TCRs on the project site, respectively. The City has not received any responses to the letters to date. As previously mentioned, Sacred Lands File failed to indicate the presence of Native American cultural resources on-site.

Nonetheless, given similar environmental factors of the proposed project site to known Native American resource sites within Contra Costa County, a moderate potential exists for unrecorded Native American resources to be discovered within the project site. Thus, the possibility exists that construction of the proposed project could directly or indirectly disturb or destroy a unique tribal cultural resource if previously unknown TCR are uncovered during grading or other ground-disturbing activities. Consequently, a significant impact to TCRs could occur. However, implementation of MM CUL-2 would ensure any TCRs uncovered during construction would not be adversely affected. Therefore, construction impacts related to previously listed or eligible TCRs would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

Implement MM CUL-2

Level of Significance After Mitigation

Less Than Significant

Lead Agency Determined Tribal Cultural Resources

Impact CUL-5: The project would not cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Construction/Operation

The City of Antioch, in its capacity as Lead Agency, has not identified or determined any known TCRs to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Further, in May 2019, the City sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project site. A response was received on June 13, 2019, indicating the search returned negative results for TCRs in the project site vicinity, and recommended contacting tribal representatives for additional information. The NAHC included a list of eight tribal representatives available for consultation. To ensure that Native American knowledge and concerns over potential TCRs that could be affected by the proposed project are addressed, a letter containing project information and requesting any additional information was sent to each of the seven tribal representatives on August 29, 2019. To date, no response has been received from any of the listed tribal representatives. As such, construction activities would not cause a substantial adverse change in the significance of a tribal cultural resource because the City has never made a significance determination.

Level of Significance

Less Than Significant

3.5.6 - Cumulative Impacts**Historic Resources**

The geographic scope of the cumulative historic resources analysis is the project site and within a 0.5-mile radius of the project site. As discussed previously, the Judsonville town site and Locus 1 are considered significant historic resources per Section 15064.5. Thus, the proposed project has the potential to impact known resources on-site and to encounter previously unknown buried resources. However, implementation of MM CUL-1 would reduce impacts to a less than significant level.

Although there is the possibility that previously undiscovered historic resources could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures would ensure that undiscovered historic resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant historic resources. Given the low potential for disruption, and the comprehensiveness of mitigation measures that would apply to the cumulative projects, the project, in conjunction with other planned and approved projects, would result in a less than significant impact related to historical resources.

Archeological Resources

Archaeological resource impacts tend to be localized, because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of

soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius).

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered archaeological resources. These projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing archaeological resources. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures would ensure that undiscovered archaeological resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant archaeological resources. Given the low potential for disruption, and the comprehensiveness of mitigation measures that would apply to the cumulative projects, the project, in conjunction with other planned and approved projects, would result in a less than significant impact related to archaeological resources.

Tribal Cultural Resources

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather, the resources and the effects upon them are generally independent. A possible exception to this would be a cultural resource that represents the last known example of its kind or is part of larger cultural resources, such as a single building along an intact historic Main Street. For such a resource, cumulative impacts, and the contribution of the proposed project to them, may be cumulatively significant.

Prehistoric, historic, and Native American cultural resources are unique and non-renewable resources. As noted previously, the potential exists for unknown subsurface archaeological and Native American cultural resources to be unearthed during site excavation. Accordingly, the proposed project could damage or destroy cultural or tribal resources particular to the project site. However, mitigation measures have been included in this EIR to ensure that any potential impacts to cultural or tribal resources would be reduced to less-than-significant levels.

The possibility exists that future development within the City and other regional development could adversely affect cultural and tribal resources. Though implementation of cumulative projects could collectively impact cultural or tribal resources in the geographic area, the proposed project's incremental impact when added to other past, present, and reasonably foreseeable future actions would be minor. In addition, the City of Antioch General Plan EIR has anticipated the buildout of the proposed project with urban land uses and has ensured that the anticipated projects would not result in substantial adverse cumulative impacts on cultural resources.

Known cultural resources are located on the project site and the potential exists for cultural or tribal resources to be located on the project site; however, as stated above, mitigation measures included in this EIR would reduce any associated impacts to less-than-significant levels. In addition, similar to

the proposed project, all other projects in the City would be subject to the same regulations and standards required to ensure a less-than-significant impact to cultural and tribal resources.

Therefore, the project's contribution to a combined effect on cultural resources would be considered less than significant.

Level of Cumulative Significance

Less Than Significant