

4.5

CULTURAL RESOURCES

4.5.1 INTRODUCTION

The Cultural Resources chapter of the EIR addresses known historic and prehistoric resources in the project vicinity and the potential for unknown resources to exist. Cultural resources can be categorized into prehistoric, historic, or paleontological resources. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. Paleontological resources are fossilized remains of non-human organisms. The analysis summarizes the existing setting and describes the potential effects to cultural resources. The analysis will both identify the thresholds of significance of possible impacts associated with the project, and develop mitigation measures that would be necessary to reduce impacts to a less-than-significant level. Information for this chapter was drawn from the *City of Antioch General Plan*¹ and associated EIR,² the Cultural Resources Survey prepared for the project area by Tom Origer & Associates,³ the Test Program Results and Evaluation for Cultural Resources⁴ and the Cultural Resources Inventory Report⁵ prepared for the proposed project by ECORP Consulting, Inc., and the Peer Review prepared by Windmiller Consulting, Inc.⁶

4.5.2 EXISTING ENVIRONMENTAL SETTING

The proposed 551.5-acre project site, historically used for grazing and limited natural gas exploration, is located in the southeastern portion of the City of Antioch in eastern Contra Costa County. The project site is situated within the Sand Creek Focus Area and is primarily undeveloped with the exception of a cattle-grazing operation, a single-family residence, and various barns and outbuildings located on the eastern portion of the site. The following environmental setting discussion for the project site consists of the historic context, paleontological context, ethnography, and tribal resources for the site, and an overview of any existing historic, paleontological, ethnography, and tribal resources known to exist in the project area.

¹ City of Antioch. *City of Antioch General Plan*. November 24, 2003.

² City of Antioch. *City of Antioch General Plan EIR*. July 2003.

³ Tom Origer & Associates. *A Cultural Resources Survey for 'The Ranch' Development Project Near Antioch, Contra Costa County, California*. August 14, 2015.

⁴ ECORP Consulting, Inc. *Test Program Results and Evaluation for Cultural Resources in the Ranch in Antioch Project Development Project*. November 2017.

⁵ ECORP Consulting, Inc. *Cultural Resources Inventory Report*. November 2017.

⁶ Windmiller Consulting, Inc. *The Ranch in Antioch Cultural Resources Peer Review*. December 6, 2017.

Historic Context

The following section includes the historic context of the project area.

Regional History

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was an excellent location for a port.

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and pueblos (towns) were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. Missions were not established in the Central Valley. The nearest missions were in the vicinity of San Francisco Bay and included Mission San Francisco de Asis (Dolores) established in 1776 on the San Francisco peninsula, Mission Santa Clara de Asis at the south end of San Francisco Bay in 1777, Mission San Jose in 1797, Mission San Rafael, established as an *asistencia* in 1817 and a full mission in 1823, and Mission San Francisco Solano in Sonoma in 1823. Presidios were established at San Francisco and Monterey. The Spanish took little interest in the area and did not establish any missions or settlements in the Central Valley.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California with its capital at Monterey. In 1827, American trapper Jedediah Smith traveled along the Sacramento River and into the San Joaquin Valley to meet other trappers of his company who were camped there, but no permanent settlements were established by the fur trappers.

The Mexican government closed the missions in the 1830s and former mission lands, as well as previously unoccupied areas, were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos". During the Mexican period there were small towns at San Francisco (then known as Yerba Buena) and Monterey. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

John Sutter, a European immigrant, built a fort at the confluence of the Sacramento and American rivers in 1839 and petitioned the Mexican governor of Alta California for a land grant, which he received in 1841. Sutter built a flour mill and grew wheat near the fort. Gold was

discovered in the flume of Sutter's lumber mill at Coloma on the South Fork of the American River in January 1848. The discovery of gold initiated the 1849 California Gold Rush, which brought thousands of miners and settlers to the Sierra foothills east and southeast of Sacramento.

The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries, which were surveyed by the U.S. Surveyor General's office. Land outside the land grants became federal public land which was surveyed into sections, quarter-sections, and quarter-quarter sections. The federal public land could be purchased at a low fixed price per acre or could be obtained through homesteading (after 1862).

Project Area History

Contra Costa County is one of the original 27 California counties created upon statehood in 1850. The County's economy was based on grazing, agriculture, and coal mining, which began at the same time as the Gold Rush. In 1848, coal was discovered on the northern slopes of Mount Diablo, attracting immigrants from all over the world who settled in boomtowns around the mines. By 1880, the coal industry had collapsed, leaving many boomtowns abandoned. However, the population centers of Pittsburg, Antioch, and Brentwood, as well as the railroads and road networks that were built to transport coal and passengers, remained and were utilized by subsequent industries such as sand mining and fruit and nut production.

Although the coal industry was largely replaced with agriculture by 1880, grazing and crop raising had always been an important part of the County's economy. In 1852, S. Hastings, the Contra Costa County Assessor, reported an "estimate of the aggregate quantity of tillable land in this county is 132,500 acres. Grazing land, 53,000 acres. The amount of Government land is probably 4,000 acres." Agriculture in the County consisted mostly of raising cattle and growing barley, along with broom corn.

In 1857, nearly 80 percent of the land within Contra Costa County was cultivated, primarily with wheat and barley. Cattle and chickens were the primary livestock raised and the County was one of the leading egg producers in the state.

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 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 4.5 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 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 and 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 and 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. The Mount Diablo Coalfields extracted four million tons of coal 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.

Until circa 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.

Known On-site Historic Resources

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. Five other studies have been conducted within one half-mile radius of the current project area.

Judsonville Town Site (P-07-000008)

Judsonville is the location of the former 19th-century coal field 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 is previously documented 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, which represents an important period in the economic development of the area. A total of 11 shovel pit tests were placed at P-07-000008, each to determine the extent of the site boundaries and to explore the potential of the site. Of these, seven yielded cultural material. The artifacts consisted of domestic and architectural refuse. The artifacts and materials found would be of interest to the general public. Buildout of the project would include construction related activities in the area of P-07-000008, and thus, would potentially affect or cause a substantial adverse change in the culture artifacts.

The Ranch Complex (P-07-000010)

The Ranch complex was built post-1939 and is currently a working ranch. Built environment features previously recorded consist of the following: Feature 1, shed; Feature 2, a barn; and Feature 3, a small shed. Archaeological features in the previous farmstead archeological deposit designated as Locus 1 consist of the following: Feature 4, a square concrete foundation; Feature 5, a possible well; Feature 6, a mortared covered brick square; and Feature 7, a large 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. Parts of the original buildings were recycled for maintenance to the site. Many of the recent additions to the property were made by the current resident and her father. Material previously recorded within Sand Creek is now absent. A total of 13 shovel test pits were placed at site P-07-000010 to determine the extent of the site boundaries and to explore the subsurface potential of the site overall, as well as Locus 1. Of these, ten were excavated at the eastern area of the site where the previous farmstead archeological deposit was located (Locus 1). The three STPs that were excavated west of the archaeological site around the vicinity of the existing ranch buildings did not yield cultural material. Artifacts were recovered between the surface and 60 centimeters below surface. Most artifacts consisted of domestic and architectural refuse. Construction activities related to the project could potentially disturb areas where artifacts are located, and thus, could damage or destroy unique artifacts.

Off-site Improvement Areas

The records search results indicated that four previous cultural resources studies have been conducted within the off-site improvement areas. As a result of those studies, one historic-period district has been recorded within the boundaries of the off-site improvement areas: the Shannon/Williamson Ranch Historic District (P-07-000303). Other sites or isolates were not previously recorded. As a result of the field survey, indication of the Shannon/Williamson Ranch

Historic District was not present within the off-site improvement areas; rather, a modern high school campus exists in the mapped location of the site.

The off-site improvement areas consist of three noncontiguous parcels located to the west, northwest, and east of the on-site project area. The off-site improvement areas have been used for ranching and agriculture since the late nineteenth century, and a transportation system to mines and mining towns existed in the western portion of the off-site improvement areas in the form of a railroad and adjacent road, until the railroad discontinued between 1901 and 1916. Buildings or structures did not exist within the off-site improvement areas until relatively recently.

Five cultural resources were recorded inside the off-site improvement areas as a result of the ECORP field survey. During the ECORP field survey, P-07-000008 was found to extend to the west into the off-site improvement areas. The on-site portion of historic-period archaeological site P-07-000008 (the Judsonville town site) has been previously evaluated as eligible for the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). The extent of the archaeological deposit is currently unknown. The following are descriptions of the five cultural resources identified on the off-site improvement areas.

RIA-001

RIA-001 is a segment of historic-period Deer Valley Road located in the off-site improvement area to the east. The off-site road alignment is shown on the 1862 General Land and Office plat map, and is mapped in 1898 as the road alignment exists today. The segment within the off-site improvement area is 0.7 mile long and varies in width from 30 feet in the south, to 75 feet in the center, and runs past Kaiser Permanente Hospital. One culvert is located below the segment that crosses over Sand Creek in the south. The road segment is currently paved, in good condition, well maintained, and heavily trafficked.

RIA-002

RIA-002 is a segment of historic-period Snodgrass Lane, a westward spur off of Deer Valley Road that first appears on topographic maps from 1898, heading to West Hartley. The segment within the eastern off-site improvement area is a gravel road approximately 40 feet long and 20 feet wide. The gravel road is in fair condition and is maintained, but is not heavily used.

RIA-003

RIA-003 is a segment of historic-period Empire Mine Road, running north-south through the northwestern off-site improvement area. The road first appears on topographic maps in 1898, adjacent to the Empire Railroad, following the same alignment as observed today. The segment is approximately 0.3 mile long and 21 feet wide and is cut into a western-facing slope. The segment is paved, but is currently closed to traffic. The road segment is in fair condition, with erosion below the pavement on the downslope side and weathered cracks in the asphalt.

RIA-004

RIA-004 is located in the western off-site improvement area and is a segment of an historic-period road grade, which was the former route of a spur of the narrow-gauge Empire Railroad. The Empire Railroad is shown on a map from 1898, but disappears from maps between 1901 and 1916. Maps from 1916 show the road in place of a westward spur of the rail line. The segment of road in the off-site improvement area is approximately 80 feet long and 10 feet wide, is currently paved with asphalt concrete, appears to be in good condition, and is in use, but not heavily used.

RIA-005

RIA-005 is located in the northwestern off-site improvement area and consists of a discarded iron water tank, overturned and abandoned on a hillside. The water tank is eight feet in diameter and 15 feet long (tall). A platform is not present to indicate the original location of the water tank. Two tires and some milled wood are scattered about the base. The water tank has been spray-painted with graffiti and cut open on what would have been the top.

Paleontological Context

Four different soils are found within the project area: Capay clay (CaA), Rincon clay (RbA), Altamont Clay (AbE), and the Altamont-Fontana complex (AcF). Capay and Rincon clays are moderate to well-drained soils found in basins and on low benches, and formed from alluvial valley fill sedimentary rock. Altamont clay is well drained and underlain by shale and soft, fine-grained sand stone, and the Altamont-Fontana clay complex is 50 percent Altamont clay and 35 percent Fontana silty clay. Historically, the four soil types were used for range, dryland grain, and volunteer hay. Underlying geomorphology are Eocene marine rocks, which consist mainly of Shale, sandstone, conglomerate, and minor limestone; and, in part Oligocene and Paleocene.

Ethnography

Archaeological evidence indicates that human occupation of California began at least 10,000 years ago. Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. The diversification of economy appears along with the development of sedentism, and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the project area was situated in an area controlled by the Bay Miwok. The Miwok were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures. They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year, and other sites were visited in order to procure particular resources

that were abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant and animal life were diverse and abundant.

Historically, coal mining and ranching prevailed in the vicinity of the project area, north of Mt. Diablo and south of the Sacramento/San Joaquin River Delta. The project area lies within the Judsonville mining district and contains the remains of the town of Judsonville on the western property boundary. The Empire Mine is associated with Judsonville. Currently, the project site is predominantly being used as pasture.

Tribal Resources

Based on the record search of the California Historical Resources Information System (CHRIS) database, known tribal resources were not found in the vicinity of the project site. In addition, the Native American Heritage Commission (NAHC) indicated that Sacred Land listings for the project area or adjacent lands do not exist.

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), a project notification letter was distributed to the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the Ohlone Indian Tribe, the Wilton Rancheria, and the Ione Band of Miwok Indians. The letters were distributed on August 16, 2017, explaining the nature of the project and soliciting comments and any additional information the individuals might have regarding tribal resources in the project area. The City did not receive any response within the mandatory 30-day response period for consultation under AB 52.

4.5.3 REGULATORY CONTEXT

Many agencies have developed laws and regulations designed to protect significant cultural resources. The following discussion contains a summary review of regulatory controls pertaining to cultural resources, including federal, State, and local laws and ordinances.

Federal Regulations

The following are the federal environmental laws and policies relevant to cultural resources.

Section 106 for the National Historic Preservation Act of 1966 (NHPA)

Federal regulations for cultural resources are governed primarily by Section 106 of the NHPA of 1966. Section 106 of NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing

regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

National Register of Historic Places

NRHP is the nation's master inventory of known historic resources. The NRHP includes listings of resources, including: buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. Resources over 50 years of age can be listed on the NRHP. However, properties under 50 years of age that are of exceptional significance or are contributors to a district can also be included on the NRHP. Four criteria are used to determine if a potential resource may be considered significant and eligible for listing on the NRHP. The criteria include resources that:

- A. Are associated with events that have made a significant contribution to the broad patterns of history; or
- B. Are associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded or may likely yield information important in prehistory or history.

A resource can be individually eligible for listing on the NRHP under any of the above four criteria, or can be listed as contributing to a group of resources that are listed on the NRHP.

A resource can be considered significant in American history, architecture, archaeology, engineering, or culture. Once a resource has been identified as significant and potentially eligible for the NRHP, the resource's historic integrity must be evaluated. Integrity is a function of seven factors: location, design, setting, materials, workmanship, feeling, and association. The factors closely relate to the resource's significance and must be intact for NRHP eligibility.

Paleontological Resources

Paleontological resources are classified as non-renewable scientific resources and are protected by several federal and state statutes, most notably by the 1906 Federal Antiquities Act (PL 59-209; 16 U.S.C. 431 et seq.; 34 Stat. 225), which calls for protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands. Because the proposed project does not include any federal lands, this statute does not apply.

State Regulations

The following are the State environmental laws and policies relevant to cultural resources.

California Environmental Quality Act

State historic preservation regulations affecting this project include the statutes and guidelines contained in CEQA (Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA requires lead agencies to consider the potential effects of a project on historic resources and unique archaeological resources. A “historic resource” includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1). Under Section 15064.5 of the CEQA Guidelines, a resource is considered “historically significant” if one or more of the following CRHR criteria have been met:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California history;
2. The resource is associated with the lives of important persons from our past;
3. The resource 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. The resource has yielded, or may be likely to yield, important information in prehistory or history.

CEQA requires preparation of an EIR if a proposed project would cause a “substantial adverse change” in the significance of a historical resource. A “substantial adverse change” would occur if a proposed project would result in physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

In addition to historically significant resources, which can include archeological resources that meet the criteria listed above, CEQA also requires consideration of “unique archaeological resources.” If a site meets the definition of a unique archaeological resource, the site must be treated in accordance with the provisions of Public Resources Code section 21083.2. Under Public Resources Code section 20183.2(g), an archaeological resource is considered “unique” if it:

- 1) Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
- 2) Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- 3) Has a special kind or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- 4) Is at least 100 years old and possesses substantial stratigraphic integrity; or
- 5) Involves important research questions that can be answered only with archaeological methods.

CEQA also includes specific guidance regarding the accidental discovery of human remains. Specifically, CEQA Guidelines Section 15064.5(e) requires that if human remains are uncovered, excavation activities must be stopped and that the county coroner be contacted. If the county coroner determines that the remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC identifies the most likely descendent, and that individual or individuals can make recommendations for treatment of the human remains under the procedures set forth in Section 15064.5 of the CEQA Guidelines.

California Register of Historic Places

The State Historic Preservation Office (SHPO) maintains the CRHR. Properties that are listed on the NRHP are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys. Criteria to determine eligibility under the CRHR are listed above.

Tribal Consultation Guidelines (Senate Bill 18)

Senate Bill (SB) 18, signed September 2004, requires local (city and county) governments to consult with California Native American tribes, when amending or adopting a general plan or specific plan, or designating land as open space, in order to aid in the protection of traditional tribal cultural places (“cultural places”). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.). The City has carried out SB 18 consultation for proposed project.

Assembly Bill 52

Assembly Bill (AB) 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. “Tribal cultural resources” are defined as either:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Local Regulations

The following are the local government's environmental policies relevant to cultural resources.

City of Antioch General Plan

The Antioch General Plan objectives and policies relating to the protection of cultural and historical resources that are applicable to the proposed project are presented below.

Objective 10.9.1 Preserve archaeological, paleontological, and historic resources within the Antioch Planning Area for the benefit and education of future residents.

Policy 10.9.2.a 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 10.9.2.b 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 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 project effects shall be initiated. A Treatment Plan detailing the objectives of the Treatment Program shall be developed. 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 Program 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, a Treatment Report shall be developed. This data recovery report shall be submitted to the City for review and comment.

- Policy 10.9.2.c 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 10.9.2.d 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 10.9.2.e Preserve historic structures and ensure that alterations to historic buildings and their immediate settings are compatible with the character of the structure and the surrounding neighborhood.

4.5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines and the City's General Plan, a significant impact would occur if the proposed project would result in the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource on site or unique geologic features;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Directly or indirectly disturb or destroy a unique tribal cultural resource, such as a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American tribe.

Method of Analysis

The CHRIS records search and Native American consultation for the project site performed by ECORP has been discussed above in this chapter. ECORP contacted the NAHC to determine whether Native American resources have been identified or are known to exist in the project area. In addition, the NAHC responded to a Sacred Lands File search request for the project site, indicating that their search of the Sacred Lands File failed to indicate the presence of Native American cultural resources on-site, or on the off-site improvement areas, with the caveat that the absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources in any project area.

As stated in Section 11 of AB 52, only a project that has a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015 is required to comply. The Notice of Preparation (NOP) for the Ranch Project EIR was filed with the State Clearinghouse on August 11, 2017. As such, the proposed project is subject to AB 52. Accordingly, the City of Antioch initiated consultation with Native American tribes pursuant to AB 52 requirements. To date, none of the tribes have responded.

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.

A field survey was completed by Patrick Cromwell, Julia Franco, Devin Hayward, Rachel Hennessy, Eddy Loyd, Juli Mercer, and Scotty Nelson from Tim Origer & Associates on July 14, 2015. The flatter portions of the project area were examined by walking in corridors approximately 30 meters wide, using a zig-zag pattern to assure complete coverage. The steeper portions 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 that the ground could be inspected throughout the project area. Subsurface soils were examined by inspecting the exposed banks of Sand Creek. Other subsurface soils were inspected where burrowing animals had deposited spoils. Visibility was good in most of the project area. ECORP conducted a subsurface investigation on the on-site project area to in order to evaluate archaeological sites P-07-000008 and P-07-000010. In addition, a pedestrian survey of the off-site improvement areas was conducted by ECORP for the current project under current (2014) U.S Army Corps of Engineers (USACE) protocols.

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 Tim Origer & Associates, and the Test Program Results report and Cultural Resource Inventory report prepared by ECORP. Mitigation measures are identified, as necessary.

Project-Specific Impacts and Mitigation Measures

As discussed in Chapter 3, Project Description, of this EIR, two development scenarios for the proposed project are currently being considered: a Multi-Generational Plan and a Traditional Plan. The following discussion of impacts is based on implementation of either of the development scenarios. Where impacts would be similar under both of the development scenarios, the discussion of impacts presented below is applicable for both scenarios. However, where impacts would differ between the two development scenarios, the impacts are discussed separately for each scenario. It should be noted that while potential impacts related to both development scenarios are analyzed, ultimately, only one development scenario would be constructed.

4.5-1 Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Multi-Generational Plan and Traditional Plan

Prehistoric or historic Native American cultural resources were not identified in the project area. 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 following resources are evaluated using the methods discussed above.

P-07-000008

For NRHP and CRHR eligibility under CRHR Criterion 1 (NRHP Criterion A), the Judsonville town site (P-07-000008) must be associated with one or more event or historic theme of importance. The site is associated with and effectively represents the material remains of the town of Judsonville, the establishment of which coincided with the opening of the Empire Coal Mine in 1877. Town sites such as Judsonville are an integral part of the coal mining complex that had such a major effect on California industry and commerce. Therefore, P-07-000008 is associated with an important event (the theme of late nineteenth century coal mining in California) at the State and local level, and is considered eligible under NRHP Criterion A and CRHR Criterion 1.

Under CRHR Criterion 2 (NRHP Criterion B), eligibility for the CRHR or NRHP would apply only to cultural resources associated with individuals whose specific contributions to history can be identified and documented as significant in our past. The importance of the individual and the length and nature of his or her association with the sites and with other sites must be determined. None of the aforementioned

associations could be established for the built portion of the Judsonville town site. Therefore, P-07-000008 is not considered eligible under NRHP Criterion B and CRHR Criterion 2.

Under CRHR Criterion 3 (NRHP Criterion C), the Judsonville town site (P-07-000008) could be eligible for the CRHR or NRHP if the resource illustrates important concepts in design and planning, if the landscape reflects an important historical trend, is distinguished in design or layout, and is the result of skilled craftsmanship. The archaeological site of Judsonville does not contain any existing buildings or structures and, therefore, is not considered eligible under NRHP Criterion C and CRHR Criterion 3.

To be eligible under CRHR Criterion 4 (NRHP Criterion D), a site must have yielded or have the potential to yield important information. ECORP determined that the Judsonville town site contains data with interpretive potential. Therefore, the Judsonville town site is considered eligible under NRHP Criterion D and CRHR Criterion 4.

For the reasons stated above, P-07-000008, the site of Judsonville, is considered eligible for the NRHP and CRHR as an individual property and as a contributing element to the Black Diamond Mines District under NRHP Criteria A and D and CRHR Criteria 1 and 4.

Built Portion of the Ranch Complex (P-07-000010)

Site P-07-000010, a historic period farmstead and ranch complex, is located along Sand Creek in the eastern part of the project area.

The Ranch complex is related to local agriculture; however, mere association is not sufficient for eligibility. Although the Ranch complex is associated with a sequence of occupants and uses, none of the uses appear to be associated with the historic context in an important way. Although the built portion of the Ranch complex housed local farming families, none of the families would be considered important in local history. Thus, the built portion of the Ranch complex would not be eligible under CRHR Criterion 1 or NRHP Criterion A.

Under CRHR Criterion 2 (NRHP Criterion B), eligibility for the CRHR or NRHP would apply only to cultural resources associated with individuals whose specific contributions to history can be identified and documented as significant in our past. None of the aforementioned associations could be established for the built portion of the Ranch complex, and therefore, the built portion of the Ranch complex would not be eligible under CRHR Criterion 2 or NRHP Criterion B.

Under CRHR Criterion 3 (NRHP Criterion C), the built portion of the Ranch complex could be eligible for the CRHR or NRHP if important concepts in design and planning are illustrated, if the landscape reflects an important historical trend,

buildings are distinguished in design or layout, and if builders are the result of skilled craftsmanship. Parts of the original buildings were recycled for maintenance to the site. Many of the recent additions to the property were made by the current resident and her father. Additionally, the material previously recorded within Sand Creek is now absent. Thus, the built portion of the Ranch complex would not be eligible under CRHR Criterion 3 or NRHP Criterion C.

To be eligible under CRHR Criterion 4 (NRHP Criterion D), the site must have yielded or have the potential to yield important information. Previous archaeological inspections of the Ranch complex and the inspection made by the project archaeologist did not locate any such information. As such, the built portion of the Ranch complex would not be considered eligible for the NRHP or CRHR under Criterion 4 (NRHP Criterion D).

In addition, the site does not possess integrity in regards to the authenticity of a property's historic identity, as parts of the original buildings were recycled and many recent additions to the property were made. Both ECORP and Tom Origer & Associates have determined the built portion of the Ranch complex as ineligible for NRHP and CRHR.

Locus 1 (P-07-000010)

Locus 1 contains features such as foundations indicating spatial organization of activities. Thus, per CRHR Criterion 4 and NRHP Criterion D, ECORP determined Locus 1 as eligible for CRHR and NRHP inclusion.

Off-site Improvement Areas

As mentioned previously, potential resources exist on the off-site improvement areas, however, the extent of where the resources are located and the eligibility of the resources is currently unknown. The proposed project would require the development of off-site infrastructure to support residential development, including the installation of up to two water pump stations and supporting water lines, as well as a temporary roadway access easement area. Thus, development and construction activities related to the proposed project could result in substantial adverse change in the significance of potential historical resources in the off-site improvement areas.

Conclusion

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. Additionally, without further assessment of the resources identified for the off-site improvement areas, the proposed project has the potential to cause a substantial adverse change in the significance to unknown and potential resources in off-site

improvement areas. Therefore, the proposed project would have a **significant** impact related to damaging or destroying such a historic cultural resource.

Mitigation Measure(s)

Implementation of the following mitigation measures would require the collection and preservation of historic resources in perpetuity. Therefore, consistent with CEQA Guidelines Section 15064.5(b)(3), the impact would be reduced to a *less-than-significant* level.

Multi-Generational Plan and Traditional Plan

- 4.5-1(a) *Prior to tentative map approval, if development of the project would not occur in areas identified as containing portions of site P-07-000008 and/or Locus 1 of site P-07-000010, mitigation is not necessary. However, if development of the 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 U.S. Army Corps of Engineers, and the qualified archeologist shall coordinate to determine the appropriate course of action, which could include data recovery, scientific analysis, and professional museum curation of material.*
- 4.5-1(b) *Prior to issuance of grading permits for any off-site improvements, the applicant shall hire an archaeologist meeting the Secretary of the Interior's professional standards for historical archaeology to conduct subsurface testing to determine the extent of the archaeological deposit of P-07-000008 within the boundaries of the off-site improvement area. If deposits of P-07-000008 are not located within the boundaries of the off-site improvement area, mitigation is not necessary. However, if deposits of P-07-000008 are located within the boundaries of the off-site improvement area and cannot be avoided, the City and the qualified archeologist shall coordinate to determine the appropriate course of action, which could include some combination of preservation in place, data recovery, and public interpretation.*
- 4.5-1(c) *Prior to issuance of grading permits for any off-site improvements, the applicant shall hire an archaeologist meeting the Secretary of the Interior's professional standards for historical archaeology to determine the extent of the following recorded cultural resources within the boundaries of the off-site improvement area: RIA-001, RIA-002, RIA-003, RIA-004, and RIA-005. If the resources are not located within the boundaries of the off-site improvement area, mitigation is not necessary. However, if any of the resources are located within the boundaries of the off-site improvement area, work shall not occur in the area until the qualified archaeologist completes a significance evaluation pursuant to Section 106 of the National Historic Preservation Act. If any of the resources are deemed significant and cannot be avoided, the City and the*

qualified archeologist shall coordinate to determine the appropriate course of action, which could include some combination of preservation in place, data recovery, and public interpretation.

- 4.5-2 Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5, directly or indirectly destroy a unique paleontological resource or unique geologic features, or disturb any human remains, including those interred outside of formal cemeteries. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.**

Multi-Generational Plan and Traditional Plan

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 resource.

Known human cemeteries or burials have not been detected through subsurface excavation or field surveys. The testing program demonstrated substantial subsurface deposits exist at each of the historic sites identified within the project area, 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 area. 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 area.

Off-site Improvement Areas

As mentioned above, the potential for buried prehistoric archaeological sites exist in the off-site improvement areas. Construction activities related to the off-site improvement areas could potentially damage or destroy such archaeological resources. In addition, excavation and grading of the project site may expose evidence of additional currently unknown archeological or paleontological resources, including shell fragments, charcoal, obsidian or chert flakes, grinding bowls, bone, and pockets of dark, friable soils. Archaeological or paleontological resources include glass, metal, ceramics, wood and similar debris. Should any previously undiscovered archaeological or paleontological resources be found during construction a substantial change in the significance or destruction of such resources could occur.

Conclusion

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, unique paleontological resources, unique geologic features, and human remains could be considered **significant**.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Multi-Generational Plan and Traditional Plan

- 4.5-2(a) *In the event that any prehistoric 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.*
- 4.5-2(b) *If a human bone or bone of unknown origin is found during earth-moving activities, all work shall stop within 100 feet of the find, and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.*
- 4.5-2(c) *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 (SOPA) and/or meet the federal standards as stated in the Code of Federal Regulations (36 CFR 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 either Register of Professional Archeologists (RPA), or 36 CFR 61 requirements.

- 4.5-2(d) *The applicant shall retain the services of a professional paleontologist/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 fossils, archeological, and/or Native American resources that may be encountered, as well as what to do in case of a discovery.*

Should any paleontological resources be unearthed by the construction crew, such as vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves), then ground-disturbing activity shall be diverted to another part of the project site and the paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely matter. Finds determined significant by the paleontologist shall then be conserved and deposited with a recognized repository, such as the University of California Museum of Paleontology. The alternative mitigation would be to leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. Proof of the construction crew awareness training shall be submitted to the City's Community Development Department in the form of a copy of training materials and the completed training attendance roster.

- 4.5-3 Directly or indirectly disturb or destroy a unique tribal cultural resource, such as a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American tribe. Based on the analysis below and with implementation of mitigation, the impact is less than significant.**

Multi-Generational Plan and Traditional Plan

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 tribal cultural resources in the project area, 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, or on the off-site improvement areas.

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 on-site project site, and off-site improvement areas. 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 tribal cultural resources are uncovered during grading or other ground-disturbing activities. Consequently, a *significant* impact to tribal cultural resources could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

Multi-Generational Plan and Traditional Plan

4.5-3 *Implement Mitigation Measures 4.5-2(a) through (d).*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would include buildout of the City of Antioch General Plan, as well as development of the most recent planned land uses within the vicinity of the project area.

4.5-4 Cumulative loss of cultural and tribal resources. Based on the analysis below and with implementation of mitigation, the cumulative impact is *less than significant*.

As defined in Section 15355 of the State CEQA Guidelines, “cumulative impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects (CEQA Guidelines 15355). Accordingly, an assessment of cumulative impacts should consider impacts identified as significant, as well as impacts identified as less-than-significant for

individual projects that may become significant in a collective sense when considering the co-occurrence of multiple projects.

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 above in Impacts 4.5-2 and 4.5-3, the potential exists for unknown subsurface archaeological, paleontological, 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 area. 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 relatively 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 off-site improvement areas; 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*.

Mitigation Measure(s)

None required.