RELATED BRISTOL, CITY OF SANTA ANA, CALIFORNIA

Archaeological Resources Assessment Report

Prepared for

RCR Bristol, LLC 18201 Von Karman Avenue, Suite 900 Irvine, CA 92612 January 2023



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RCR Bristol, LLC 18201 Von Karman Avenue, Suite 900 Irvine, CA 92612

Prepared by:

ESA

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Project Location:

Newport Beach (CA) USGS 7.5-minute Topographic Quad Township 5 South, Range 10 West, Unsectioned

Acreage: Approx. 41.1 acres

Assessor Parcel Numbers: 412-131-12 and

412-131-22

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Statement of Confidentiality

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EXECUTIVE SUMMARY

Related Bristol – Archaeological Resources Assessment Report

Environmental Science Associates (ESA) has been retained by RCR Bristol, LLC (Client) to conduct an archaeological resources inventory for Related Bristol Specific Plan (Project) pursuant to the California Environmental Quality Act (CEQA). The proposed Project would redevelop a 41.1-acre Project Site in Santa Ana for a walkable mixed-use neighborhood of residential, retail, hotel and senior living uses under a Specific Plan entitlement process in the City of Santa Ana (City). The Project area is bounded by South Bristol Street to the east, West MacArthur Boulevard to the north, Sunflower Avenue to the south, and South Plaza Drive to the west, in the City of Santa Ana, California. The Project site is identified in the Santa Ana's General Plan Land Use Element as being located within the South Bristol Street Focus Area. The Related Bristol Specific Plan will replace existing zoning districts, becoming the zoning for the property. Within the General Plan South Bristol Street Focus Area, the Project site is designated District Center-High (DC-5). The City is the lead agency pursuant to the California Environmental Quality Act (CEQA).

A records search for the Project was conducted on September 20, 2022 at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at University of California, Fullerton. The records search included a review of all previously recorded archaeological resources, historic architectural resources, and previous studies within the Project area and a 0.5-mile radius of the Project area.

The records search results indicate that four archaeological resources have been previously recorded within a 0.5-mile radius of the Project area. Approximately 30 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of the four archaeological resources, one (P-30-001515) is a prehistoric archaeological site and three (P-30-100342, -100343, -100344) are historic-period archaeological isolates. No archaeological resources have been previously recorded within the Project area.

A Sacred Lands File (SLF) conducted by the California Native American Heritage Commission (NAHC) on September 9, 2022 indicated that no Native American cultural resources are known to be located within the Project area.

A cultural resources survey of the Project area was conducted on October 6, 2022 to identify surface evidence of archaeological resources. No archaeological resources were identified as a result of the survey.

A subsurface sensitivity assessment was undertaken to assess the potential for subsurface archaeological resources within the Project area. Sources reviewed include geologic maps and soil maps, as well as the results of the SCCIC records search, the existing geotechnical report for the Project, and the historic map and aerial review. A review of these materials suggest the Project area is sensitive for prehistoric and historic-period archaeological deposits as a result of the following: the Holocene age of the surficial soils, the presence of previously stable landforms in the soil stratigraphy, the presence of known prehistoric and historic archaeological sites within a 0.5-mile radius of the site, and the historic period, since demolished agriculture related structures located within the Project area. However, disturbances within the Project area associated with construction and activities associated with the development of the site and prior agricultural activities across the Project area, reduce the sensitivity for intact subsurface archeological deposits at depths less than 18 inches.

Although the records search and survey did not identify archaeological resources, the Project area is considered sensitive for both prehistoric and historic-period archaeological resources and there is potential for the discovery of subsurface archaeological deposits during ground disturbance. As such, recommended mitigation measures, including the retention of a qualified archaeologist, archaeological and Tribal monitoring, and procedures to be followed in the event of the discovery of archaeological resources or human remains, are provided in the *Summary and Recommendations* section at the close of this report

RELATED BRISTOL

Archaeological Resources Assessment Report

Introduction

Environmental Science Associates (ESA) has been retained by RCR Bristol, LLC (Client) to conduct an archaeological resources inventory for Related Bristol Specific Plan (Project) pursuant to the California Environmental Quality Act (CEQA). The proposed Project would redevelop a 41.1-acre Project Site in Santa Ana for a walkable mixed-use neighborhood of residential, retail, hotel and senior living uses under a Specific Plan entitlement process in the City of Santa Ana (City). The Project area is bounded by South Bristol Street to the east, West MacArthur Boulevard to the north, Sunflower Avenue to the south, and South Plaza Drive to the west, in the City of Santa Ana, California (APN: 412-131-12 and 412-131-22). The City is the lead agency pursuant to the CEQA.

ESA personnel involved in the preparation of this report are as follows: Monica Strauss, M.A., RPA., Project Director and Principal Investigator; Michael Vader, B.A, and Salpi Bocchieriyan M.A., RPA, report authors and surveyors; and Jaclyn Anderson, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

The 41.1-acre Project area is located in City of Santa Ana in the south-central portion of the city (**Figure 1**). The Project includes Assessor Parcel Numbers (APNs) 412-131-12 and 412-131-22 and is bounded by South Bristol Street to the east, West MacArthur Boulevard to the north, Sunflower Avenue to the south, and South Plaza Drive to the west. Specifically, the Project is located in an unsectioned portion of Township 5 South, Range 10 West on the Newport Beach, CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (**Figure 2**).

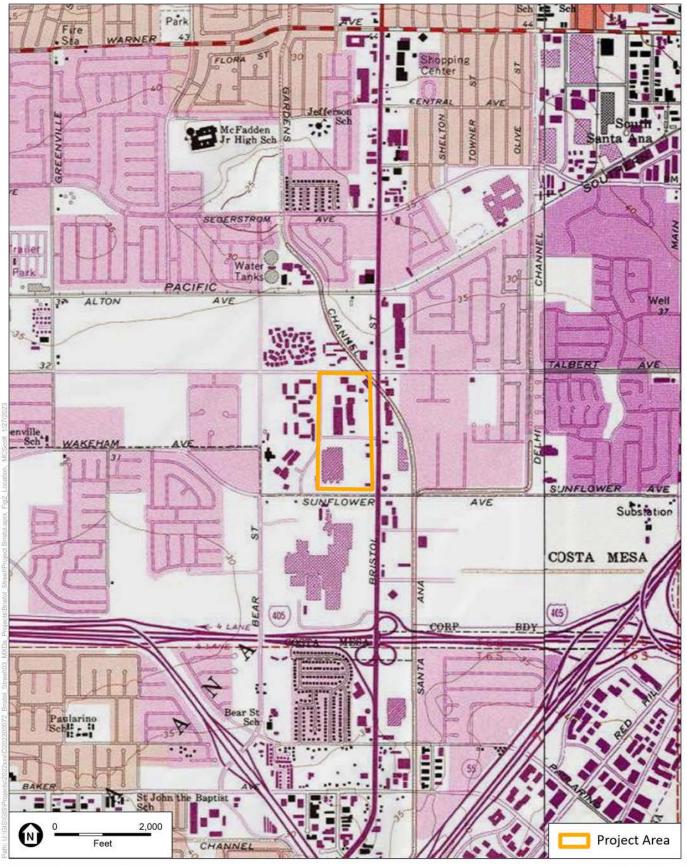
Project Description

The Project proposes the redevelopment of an approximately 41.1-acre project site bordered by MacArthur Boulevard to the north, Sunflower Avenue to the south, and Bristol Street to the east. The western border is at Plaza Drive between MacArthur Boulevard and Callen's Common and by existing development between Callen's Common and Sunflower Avenue to the west. The Project site is a relatively flat and gently sloping area within the larger South Coast Metro area of Orange County (County), an intensive and urban mixed-use area. The Project site includes nine parcels (APNs 412-131-12, 412-131-13, 412-131-14, 412-131-16, 412-131-17, 412-131-22, 412-131-24, 412-131-25 and 412-131-26) and is developed with approximately 465,063 square feet



Figure 1
Regional Location





SOURCE: USGS 2022; ESA, 2022 Related Bristol

Figure 2
Project Location



(sf) of retail and restaurant uses with some medical office, financial, and fitness uses. The site includes 3 multi-story buildings and 13 one-story buildings with single and multiple tenants. The Project would demolish the existing shopping center and related infrastructure to allow for the construction of a mixed-use development with up to 3,750 multi-family residential units, up to 350,000 sf of commercial uses, a hotel with up to 250 keys, a senior living facility with up to 200 units, and approximately 13 acres of common open space. Parking would be shared between buildings and provided by above- and below-ground structures. One and two levels of subterranean parking are proposed. Where two levels are excavated, subterranean excavation would extend up to approximately 27 feet below grade.

The Project site is identified in the Santa Ana's General Plan Land Use Element as being located within the South Bristol Street Focus Area. The Related Bristol Specific Plan will replace existing zoning districts, becoming the zoning for the property; it will define the present allowable uses and development standards, as well as the processes and procedures for the approval of future development within its boundaries. Within the General Plan South Bristol Street Focus Area, the Project site is designated District Center-High (DC-5). The District Center-High is a mixed-use designation identified in the General Plan as including "Transit-oriented and high-density urban villages consisting of visually striking and dynamic buildings and spaces with a wide range and mix of residential, live-work, commercial, hotel, and employment-generating uses."

Setting

Natural Setting

The Project is located in a developed and urbanized area within the City. Geologically, the Project is located at the southern margin of the Los Angeles Basin which is part of the Peninsular Range geomorphic province of California. The Peninsular Ranges province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California. The province varies in width from approximately 30 to 100 miles. The Peninsular Ranges consist of a series of northwest trending mountain ranges separated by valleys. In general, geology of the ranges includes granitic rock intruding older metamorphic rocks while the geology of the valleys consists of shallow to deep alluvial basins consisting of gravel, sand, silt, and clay.

The Project area is located at the southern margin of the Los Angeles Basin where it meets the Newport-Inglewood uplift, characterized by Miocene costal mesas and Pleistocene marine sediments and marine terrace deposits. Soils within the Project area are Holocene alluvial soils with young axial channel deposits at surface.

Prehistoric Setting

The chronology of coastal southern California is typically divided into three general time periods: the Early Holocene (11,000 to 8,000 Before Present [B.P.]), the Middle Holocene (8,000 to 4,000 B.P.), and the Late Holocene (4,000 B.P. to A.D. 1769). Within this timeframe, the archaeology of southern California is generally described in terms of cultural "complexes." A complex is a specific archaeological manifestation of a general mode of life, characterized archaeologically by

particular technologies, artifacts, economic systems, trade relationships, burial practices, and other aspects of culture.

Early Holocene (11,000 to 8,000 B.P.)

While it is not certain when humans first came to California, their presence in southern California by about 11,000 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural materials have been radiocarbon dated to between 11,100 and 10,950 years B.P. (Byrd and Raab, 2007). On the mainland, radiocarbon evidence confirms occupation of the Orange County and San Diego County coast by about 9,000 B.P., primarily in lagoon and river valley locations (Gallegos, 2002). In western Riverside County, few Early Holocene sites are known to exist. One exception is site CA-RIV-2798, which contains deposits dating to as early as 8,580 cal. B.P. (Grenda, 1997). During the Early Holocene, the climate of southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab, 2007).

The primary Early Holocene cultural complex in coastal southern California was the San Dieguito Complex, occurring between approximately 10,000 and 8,000 B.P. The people of the San Dieguito Complex inhabited the chaparral zones of southwestern California, exploiting the plant and animal resources of these ecological zones (Warren, 1967). Leaf-shaped and large-stemmed projectile points, scraping tools, and crescentics are typical of San Dieguito Complex material culture.

Middle Holocene (8,000 to 4,000 B.P.)

During the Middle Holocene, there is evidence for the processing of acorns for food and a shift toward a more generalized economy in coastal and inland southern California. The processing of plant foods, particularly acorns, increased, a wider variety of animals were hunted, and trade with neighboring regions intensified (Byrd and Raab, 2007).

The Middle Holocene La Jolla Complex (8,000–4,000 B.P.) is essentially a continuation of the San Dieguito Complex. La Jolla groups lived in chaparral zones or along the coast, often migrating between the two. Coastal settlement focused around the bays and estuaries of coastal Orange and San Diego Counties. La Jolla peoples produced large, coarse stone tools, but also produced well-made projectile points and milling slabs. The La Jolla Complex represents a period of population growth and increasing social complexity, and it was also during this time period that the first evidence of the exploitation of marine resources and the grinding of seeds for flour, as indicated by the abundance of millingstones in the archaeological record, appears (Byrd and Raab, 2007).

Contemporary with the La Jolla Complex, the Pauma Complex has been defined at inland sites in San Diego and Riverside Counties (True, 1958). The Pauma Complex is similar in technology to the La Jolla Complex; however, evidence of coastal subsistence is absent from the Pauma Complex sites (Moratto, 1984). The Pauma and La Jolla Complexes may either be indicative of separate inland and coastal groups with similar subsistence and technological adaptations, or, alternatively, may represent inland and coastal phases of one group's seasonal rounds. The latter

hypothesis is supported by the lack of hidden and deeply buried artifacts at Pauma sites, indicating that these sites may have been temporary camps for resource gathering and processing.

Late Holocene (4,000 B.P. to A.D. 1769)

During the Late Holocene, native populations of southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps (Byrd and Raab, 2007). Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab, 2007).

Around 1,000 B.P., an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA), occurred. While the effects of this environmental change on prehistoric populations are still being debated, it did likely lead to changes in subsistence strategies in order to deal with the substantial stress on resources (Jones and Schwitalla, 2008). In coastal southern California, beginning before the MCA but possibly accelerated by it, conditions became drier and many lagoons had been transformed into saltwater marshes. Because of this, populations abandoned coastal mesa and ridge tops to settle nearer to permanent freshwater resources (Gallegos, 2002).

Although the intensity of trade had already been increasing, it reached its zenith in the Late Holocene, with asphaltum (tar), seashells and steatite being traded from southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl (Byrd and Raab, 2007). Small projectile points, ceramics, including Tizon brownware pottery, and obsidian from Obsidian Butte (Imperial County), are all representative artifacts of the Late Holocene.

It has been postulated that as early as 3,500 B.P., a Takic-speaking people arrived in coastal Los Angeles and Orange counties, having migrated west from inland desert regions (Kroeber, 1925; Sutton, 2009; Warren, 1967). By around 1,500 to 1,000 B.P., Takic language and cultures had spread to the south and inland to the east. These new arrivals, linguistically and culturally different from earlier coastal populations, may have brought new settlement and subsistence systems with them, along with other new cultural elements. This migration has been postulated as being a factor in several of the significant changes in material culture seen in the Late Holocene (such as the use of smaller projectile points and pottery), as well as the introduction of cremation as a burial practice.

The San Luis Rey culture (divided into San Luis Rey I [AD 1400 to 1750] and San Luis Rey II [AD 1750 to 1850]) represented the Late Period in southwestern Riverside County and northern San Diego County (Moratto, 1984). San Luis Rey I village sites contain manos (hand stones), metates (grinding slabs), bedrock mortars, shell artifacts, and triangular arrow points. In addition to these features, San Luis Rey II sites are characterized by the presence of pottery, pictographs, and the cremation of the dead (Moratto, 1984).

San Luis Rey settlement patterns in the upper San Luis Rey River drainage are typified by seasonally occupied lowland villages located in proximity to water sources, and highland villages occupied in the late summer and fall for acorn collection (True and Waugh, 1982). However,

settlement patterns within southwestern Riverside County are less well known. The available information, stemming primarily from survey data, indicates that four primary site types existed within the region during the Late Period: field camps, resource procurement locations, residential bases, and villages (Mason, 1999). Resource procurement locations and field camps, the most common site types, contain a limited assemblage of artifacts and subsistence remains, primarily lithic debitage, some tools, fire affected rock, and small amounts of animal bones and charred seeds and nuts. This indicates that these types of sites were used primarily for focused activities and short-term occupancy.

Villages and residential bases, on the other hand, show evidence for long-term occupation by large groups of people. Villages were occupied year-round, while residential bases were occupied seasonally. Artifacts and features found at both villages and residential bases, including large amounts of faunal and botanical remains, numerous high-quality tools, fire-affected rock, and anthrosols, indicate a wide range of activities (Mason, 1999). Bedrock mortars point to the processing of seeds and acorns, and ceremonial activities are evidenced by the presence of pictographs, petroglyphs, and cupules within village sites.

Ethnographic Setting

Gabrielino (or Tongva and Kizh)

The term "Gabrielino" is a general term that refers to those Native Americans who were administered by the Spanish at the Mission San Gabriel Arcángel. Prior to European colonization, the Gabrielino occupied a diverse area that included: the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Kroeber, 1925). Their neighbors included the Chumash and Tataviam to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino language was part of the Takic branch of the Uto-Aztecan language family.

Two indigenous terms are commonly used by tribal groups refer to themselves and are preferred by descendant groups: Tongva and Kizh. The term Tongva was recorded by ethnographer C. Hart Merriam in 1903 (Heizer, 1968). The term Kizh was first published by ethnologist Horatio Hale in 1846 (Heizer, 1968). Since there are two terms that are used by different groups to refer to themselves, the term Gabrielino is used in this section to encompass both Tongva and Kizh groups.

The Gabrielino Indians were hunter-gatherers that lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith, 1978). The primary plant resources were the acorn, gathered in the fall and processed in mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly-leafed cherry. Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The

Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber, 1925).

The Late Prehistoric period, spanning from approximately 1,500 years B.P. to the mission era, is the period associated with the florescence of the Gabrielino (Wallace, 1955). Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to make contact with the Gabrielino Indians. The Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith, 1978). The nearest Gabrielino villages to the Project area include *Lukupa/Lopuuknga* (located approximately 5 miles southwest of the Project area), *Pasbenga/Paasvenga* (located approximately 4 miles north the Project area), and *Kengaa/Kiinga* (located approximately 6.5 miles south if the Project area).

Juaneño (or Acjachemen)

The Juaneño spoke a language belonging to the Cupan group of the Takic subfamily of the Uto-Aztecan language family. The Juaneño people were so called because of their association with Mission San Juan Capistrano, although some contemporary Juaneño identify themselves by the indigenous term *Acjachemen*. The term Acjachemen is the name of the main village and was used by Fray Gerónimo de Boscana describe the indigenous group associated with the Mission San Juan Capistrano. During his time at San Juan Capistrano, Boscana compiled an ethnographic account of the Acjachemen.

The Juaneño were linguistically and culturally related to the neighboring Luiseño (with whom they are often grouped; see Bean and Shipek, 1978), Cahuilla, and Cupeño. Juaneño territory extended from just above Aliso Creek in the north to San Onofre Canyon in the south and inland from the Pacific Ocean to Santiago Peak and the ridges above Lake Elsinore (Bean and Shipek, 1978).

The Juaneño lived in sedentary autonomous villages located in diverse ecological zones. Each settlement claimed specific fishing and collecting regions. Typically, villages were located in valley bottoms, along coastal strands and streams, and near mountain foothills. Villages were usually sheltered in coves or canyons, on the side of slopes near water and in good defensive spots.

Trails, hunting sites, temporary hunting camps, quarry sites, and ceremonial and gaming locations were communally owned, while houses, gardens, tools, ritual equipment, and ornamentation were owned by individuals or families. Most groups had fishing and gathering sites along the coast that they visited annually from January to March when inland supplies were scarce. October to November was acorn-gathering time, when most of the village would settle in the mountain oak groves. Houses were conical in form, partially subterranean, covered with thatch, reeds, brush, or bark. Sweathouses were round and earth covered. Each village was enclosed with a circular fence and had a communal ceremonial structure at the center (Bean and Shipek, 1978).

Historic Setting

The first European presence in what is now southern California came in 1542, when Juan Rodriguez Cabrillo led an expedition along the coast. Europeans did not return until 1769, when

the expedition of Gaspar de Portola traveled overland from San Diego to San Francisco. Juan Bautista de Anza is credited with the discovery of an inland route from Sonora to the northern coast of California in 1774, bringing him through much of present-day Riverside and San Bernardino counties (Greene, 1983; Rolle, 2003). With the opening of the overland route, Spanish pueblos were established, evolving into the Spanish system of governance.

In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples (Horne and McDougall, 2003). The purpose of the missions was to encourage, by any means necessary, the assimilation of Native populations to adopt the Spanish custom, language, and religion. The mission strategy relied upon an agricultural economy and as such, locations selected for the construction of a mission depended upon three factors: arable soil for crops, an adequate supply of fresh water, and a large local Indian population for labor (Rolle, 2003).

In 1821 Mexico, which included much of present-day California, became independent from Spain, and during the 1820s and 1830s the California missions were secularized. Mission property was supposed to have been held in trust for the Native Californians, but instead was handed over to civil administrators and then into private ownership as land grants. After secularization, many former Mission Indians were forced to leave the Missions and seek employment as laborers, ranch hands, or domestic servants (Horne and McDougall, 2003). Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period. Hides and tallow from cattle became a major export for Californios (native Hispanic Californians), many of whom became wealthy and prominent members of society.

As a result of the Mexican-American War (1846-1848) Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in 1848. While the treaty recognized the right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican authorities, the claimant was required to prove their right to the land before a patent was given. The process was lengthy and generally resulted in the claimant losing at least a portion of their land to attorney's fees and other costs associated with proving ownership (Starr, 2007). California officially was admitted to the Union and became a part of the United States in 1850.

When the discovery of gold in northern California was announced in 1848, a huge influx of settlers from other parts of North America flooded into California. The increased population provided an additional market for the cattle industry that was established during the Spanish and Mexican periods. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during this period (McWilliams, 1946; Dinkelspiel, 2008). These droughts, coupled with the burden of proving ownership of their lands, caused many Hispanic-Californian landowners to lose their lands during this period (McWilliams, 1946). Former ranchos were subsequently subdivided and sold for agriculture and residential settlement.

History of the Project Area

In July of 1769, the valley in which Santa Ana is located was visited during a Franciscan expedition led by Don Gaspar Portola. The explorers christened the valley Rancho Santiago de

Santa Ana in honor of Saint Anne (City-Data.com 2022). In 1810, a member of the expedition, Antonio Yorba, and his nephew, Juan Peralta, received a grant from the Spanish governor of California for all the land extending from the foothills of Santa Ana Canyon to the ocean (City-Data.com 2022). They used the land to graze cattle and later developed irrigation systems fed by water from the Santa Ana River. The land was quite fertile, and with the establishment of several ranches in the valley, the area soon became an agricultural hotspot.

Mexico broke away from Spain in 1821, taking California with them. Throughout the Mexican era, the entire region experienced minimal development. When the Mexican American War concluded in 1848, Mexico ceded California to the United States, and two years later, California became the 31st state. Santa Ana appeared as a township of Los Angeles County in the 1860 and 1870 censuses. In 1869, William H. Spurgeon purchased seventy acres from the Yorba heirs and drew up a town plan (City-Data.com 2022). The community was officially laid out later that year, and development plans went into effect. Santa Ana evolved as a commercial center because of its central location in the valley, becoming a natural marketplace for crops produced in the surrounding region that is now Orange County.

Rail travel was a major factor in the development and expansion of Santa Ana. The Southern Pacific Railroad connected Santa Ana to Los Angeles in 1877 and the population grew immensely (The Electrical Railway Historical Association of Southern California 2022). In 1887, the California Central Railway broke the Southern Pacific Railroad's local monopoly on rail travel and began to offer service between Los Angeles and San Diego with Santa Ana as an intermediate station (The Lost Angeles Times 2015). In 1886, Santa Ana was incorporated, and three years later Orange County was separated from Los Angeles County and Santa Ana was named the county seat (Orange County Historical Society 2022). Since then, Santa Ana has established itself as Orange County's "government powerbase," now colloquially known as Downtown Orange County.

During World War II, the Santa Ana Army Air Base (SAAAB) was built as a training center for the United States Army Air Forces. Without planes, hangers, or runways, the facility served as a basic training camp where newly inducted soldiers were given nine weeks of training to determine what specialties they would pursue. The base was responsible for continued population growth in Santa Ana and the rest of Orange County as many veterans moved to the area to raise families after the war ended. World War II brought further development as industry moved into the area. The population of Santa Ana increased from around 49,000 people in 1900 to nearly 210,000 residents in 1950. A city charter, providing for a council-manager form of government, was adopted in 1952 (Military Museum 2022). Since World War II, Santa Ana has become a financial and governmental center of Orange County.

Freeway construction in Orange County began in the 1950s with the opening of the Santa Ana (I-5) Freeway and continued into the 1970s. Over time, Santa Ana drew large commercial sectors, including manufacturing, industrial, technology, and aerospace (The History of Santa Ana, California 2022). Beginning in the 1990s, toll roads were added in some areas to meet the needs of growing communities. Efforts began in the 1980s to restore and revitalize the city of Santa Ana, especially its downtown. As a result, the city has become known for its historic downtown

and Main Place shopping center, which created thousands of jobs in the heart of the city. Santa Ana residents of the twenty-first century enjoy cultural and ethnic diversity as well as continuing status as the financial and governmental center of Orange County (City-Data.com 2022).

Regulatory Framework

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at *Public Resources Code (PRC) Section 21000 et seq.* CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The CEQA Guidelines (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (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 (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (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 by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of Section 21083, which is as a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5(a). Substantial adverse change is defined as "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)). According to *CEQA Guidelines* Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

- A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards) (Grimmer, 2017) is considered to have mitigated its impacts to historical resources to a less-than-significant level (CEQA Guidelines Section 15064.5(b)(3)).

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

- 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.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties
 identified as eligible for listing in the National Register, the California Register, and/or a
 local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California PRC Section 5097.98, as amended, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by

substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Senate Bill 18

Senate Bill 18 (SB 18) (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent 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" (Governor's Office of Planning and Research, 2005).

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the *Tribal Consultation Guidelines: Supplement to General Plan Guidelines* (Governor's Office of Planning and Research, 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local
 government must refer the proposed action to those tribes that are on the NAHC contact list
 and have traditional lands located within the city or county's jurisdiction. The referral must
 allow a 45-day comment period (Government Code Section 65352). Notice must be sent
 regardless of whether prior consultation has taken place. Such notice does not initiate a new
 consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

City of Santa Ana General Plan

The City of Santa Ana's updated General Plan Update (GPU) (October 2021) specifies, under Chapter 5.4, the following policies addressing archaeological, paleontological, and historical resources shall be implemented at appropriate stage(s) of planning, coordinated with the processing of a project application, as follows:

Policy 1.4 Protecting Resources - Support land use plans and development proposals that actively protect historic and cultural resources. Preservation tribal, archeological, and paleontological resources for their cultural importance to communities as well as their research and educational potential

In addition, the Program Environmental Impact Report (PEIR) for the city's GPU states that development consistent with the GPU could impact archaeological resources and therefore the following mitigation measures have been established to reduce these impacts to a less than significant level:

CUL-4: For projects with ground disturbance—e.g., grading, excavation, trenching, boring, or demolition that extend below the current grade—prior to issuance of any permits required

to conduct ground-disturbing activities, the City shall require an Archaeological Resources Assessment be conducted under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards in either prehistoric or historic archaeology. Assessments shall include a California Historical Resources Information System records search at the South Central Coastal Information Center and of the Sacred Land Files maintained by the Native American Heritage Commission. The records searches will determine if the proposed project area has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. If unpaved surfaces are present within the project area, and the entire project area has not been previously surveyed within the past 10 years, a Phase I pedestrian survey shall be undertaken in proposed project areas to locate any surface cultural materials that may be present.

- CUL-5: If potentially significant archaeological resources are identified, and impacts cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the Secretary of the Interior's Standards to determine significance prior to any ground-disturbing activities. If resources are determined significant or unique through Phase II testing, and site avoidance is not possible, appropriate site-specific mitigation measures shall be undertaken. These might include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the Office of Historical Preservation's "Archaeological Resource Management Reports (ARMR): Recommended Contents and Format" (OHP 1990) and "Guidelines for Archaeological Research Designs" (OHP 1991).
- CUL-6: If the archaeological assessment did not identify archaeological resources but found the area to be highly sensitive for archaeological resources, a qualified archaeologist and a Native American monitor approved by a California Native American Tribe identified by the Native American Heritage Commission as culturally affiliated with the project area shall monitor all ground-disturbing construction and pre-construction activities in areas of high sensitivity. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. The Native American monitor shall be invited to participate in this training. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's Standards. This will include tribal consultation and coordination with the Native American monitor in the case of a prehistoric archaeological resource or tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinternment in an area designated by the tribe.

CUL-7: If an Archaeological Resources Assessment does not identify potentially significant archaeological resources but the site has moderate sensitivity for archaeological resources (Mitigation Measure CUL-4), an archaeologist who meets the Secretary's Standards shall be retained on call. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The pre-construction training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. The resource shall be evaluated for significance and tribal consultation shall be conducted, in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant.

Archival Research

SCCIC Records Search

A records search for the Project was conducted on September 20, 2022 at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at University of California, Fullerton. The records search included a review of all recorded archaeological resources, historic architectural resources, and previous studies within the Project area and a 0.5-mile radius of the Project area.

Previous Cultural Resources Investigations

The records search results indicate that 16 cultural resources studies have been conducted within a 0.5-mile radius of the Project area (**Table 1**). Approximately 30 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of the 16 previous studies, one (OR-041197) overlaps the Project area. Only a small portion, approximately five percent of the actual Project area, has been included in previous cultural resources studies.

Previously Recorded Cultural Resources

The records search results indicate that four archaeological resources have been previously recorded within a 0.5-mile radius of the Project area (**Table 2**). Of the four archaeological resources, one (P-30-001515) is a prehistoric archaeological site and three (P-30-100342, -100343, -100344) are historic-period archaeological isolates. No archaeological resources have been previously recorded within the Project area.

TABLE 1
PREVIOUS CULTURAL RESOURCES INVESTIGATIONS

Author	SCCIC# (OR-)	Title	Year
Arrington, Cindy and Nancy Sikes	3373	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	
Atchley, Sara M.	2200	Cultural Resources Investigation for the Nextlink Fiber Optic Project, Los Angeles and Orange Counties, California	
Bonner, Diane, Wills, Carrie, and Crawford, Kathleen	4441	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02098A (CM098 LC117) 3220 South Bristol, Santa Ana, Orange County, California	
Bonner, Wayne and Crawford, Kathleen	4442	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate LA02098A (CM098 LC117) 3220 South Bristol, Santa Ana, Orange County, California	
Brock, James P.	518	Archaeological Test Excavation Report: The Sakioka Site, Near South Coast Plaza, Costa Mesa, Orange County, California	
Brown, Joan C.	01197*	Cultural Resources Reconnaissance of Ten Miles of the Santa Ana-Delhi Channel Complex, Orange County, California	
Chasteen, Carrie	4172	Historic Property Survey Report San Diego Freeway (I- 405) Improvement Project SR-73 to I-605, Orange and Los Angeles Counties	
Demcak, Carol R.	2127	Final Report on Archaeological and Paleontological Monitoring for Robinson-may Expansion Project, City of Costa Mesa	
Duke, Curt	2553	Cultural Resource Assessment at & T Wireless Services Facility No. 13369a Orange County, California	
Ferraro, David and Joan Brown	2057	Archaeological and Paleontological Monitoring for Romano's Macaroni Grill, South Coast Metro Center, Costa Mesa, California	
Ferraro, David D.	2128	Archaeological and Paleontological Monitoring for Retail Building Site Preparation at 545 Anton Boulevard, South Coast Metro Center, Costa Mesa	2000
Macko, Michael E.	1703	Results of an Archaeological Resource Literature Review, Field Survey, and Report for the AT & T Anaheim to Mission Viejo Lightguide System, Santa Ana P.O.P. Diversity	1994
Padon, Beth	1010	An Archaeological Study of an 11.2 Acre Parcel Within the Town Center Area of Costa Mesa	
Supernowicz, Dana	4286	Architectural Evaluation Report of the AT&T Switch Project, AT&T Mobility Site No. OC0320, 3220 South Bristol Street, Santa Ana, Orange County, California 92704	
Unknown	2603	Draft Environmental Impact Report Bear Street Project Arnel Development Company	
Van Horn, David M.	289	Sakioka Property Archaeological Survey Report	1978

TABLE 2
PREVIOUSLY RECORDED CULTURAL RESOURCES

P- Number (P-30-)	Permanent Trinomial (CA-ORA-)	Other Designation	Description	Date Recorded	Eligibility	Approximate Distance from Project
001515	001515	LSA-IBI830-S-2	Prehistoric site - shell scatter	1999	unknown	0.5 miles southeast
100342	-	IO-1 (Armstrong Ranch)	Historic-period isolate	2002	ineligible	0.4 miles northwest
100343	-	IO-2 (Armstrong Ranch)	Historic-period isolate	2002	ineligible	0.4 miles northwest
100344	-	IO-3 (Armstrong Ranch)	Historic-period isolate	2002	ineligible	0.4 miles northwest

Sacred Lands File Search

The California Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on August 11, 2022 to request a search of the SLF. The NAHC responded to the request in a letter dated September 9, 2022. The results of the SLF search conducted by the NAHC were negative indicating that Native American traditional/cultural resources are not known to be located within the Project vicinity (**Appendix B**).

Historic Maps and Aerial Photographs

Historic topographic maps and aerial photographs were examined to provide information relevant to historical land uses associated with the Project area and to contribute to an assessment of subsurface archaeological sensitivity. Available maps include the 1896, 1901, and 1942 Santa Ana, CA 15-minute topographic quadrangle and the 1932, 1935, 1949, 1951, 1965, 2012, 2015, and 2018 Newport Beach, CA 7.5-minute topographic quadrangle. Historic aerial photographs of the Project area were available for the years 1952, 1953, 1963, 1972, 1980, 1985, 1987, 1994, 1995, 1999, 2002, 2005, 2009, 2010, 2012, 2014, 2016, and 2018 (historicaerials.com 2022).

The 1896 and 1901 Santa Ana, CA 15-minute topographic maps show the Project area in Santa Ana as largely undeveloped with the exception of a north/south trending road that may be analogous to South Bristol Street bisecting the Project area. There are additional, disparate north/south and east/west trending roads lined with sporadic structures in the vicinity, the Santa Ana River is shown to the west of the Project area, and marshlands are shown to the south. The 1932 and 1935 Newport Beach, CA 7.5-minute topographic maps show the same road bisecting the Project area along with a second north/south trending road analogous to South Plaza Drive and a structure between the two roads within the Project area. There are no notable changes in the 1942 Santa Ana, CA 15-minute topographic map and the 1949 and 1951 Newport Beach, CA 7.5-minute topographic maps. The 1965 Newport Beach, CA 7.5-minute topographic map, photo revised in 1968, 1974, and 1982, shows a second structure and a short road extending west towards the structure have been developed within the Project area by 1968, four new structures along the eastern margin of the Project area as well as a large structure in the southwestern portion of the Project area

have been developed within the Project area by 1974, and nearly all the remaining extant structures have been developed within the Project area by 1982. The 1982 photo revised 1965 Newport Beach, CA 7.5-minute topographic map also shows a structure along the north central portion of the Project and the east central portion of the Project that appear to have since been demolished. Additionally, this map shows that the extant structures at the northwest corner of the Project area and the west central portion of the Project area had not yet been developed by 1982. The 2012, 2015, and 2018 Newport Beach, CA 7.5-minute topographic maps show no notable changes.

The 1952, 1953, and 1963 aerial photography depicts the Project area and larger vicinity with agricultural uses; roads analogous to South Plaza Drive and South Bristol Street are shown within the Project area and a cluster of structures with presumable farming related uses are shown in the center of the Project area. In the 1972 imagery, a portion of the north half of the Project area is being graded while some extant structures have already been erected in both the north and south halves of the Project area. The cluster of farming-related structures appear to have been demolished sometime between 1963 and 1972. Additionally, portions of the Project area have been paved and rendered parking lots. The surrounding areas have been graded and developed, are being graded and developed, or remain agricultural land. The 1980 imagery shows the Project area largely as it appears today, however, there is one additional structure at the north portion of the Project area which has since been demolished; imagery from 1994 and 1995 show that the west half was demolished by 1995 and the remainder had been demolished by 1999. In the 1987 imagery, the building footprint for the structure in the northwestern corner of the Project area appears to have been reduced since 1980 and two structures that remain extant have been erected along the east central margin of the Project area. There were no noteworthy changes on subsequent available imagery.

Subsurface Sensitivity Assessment

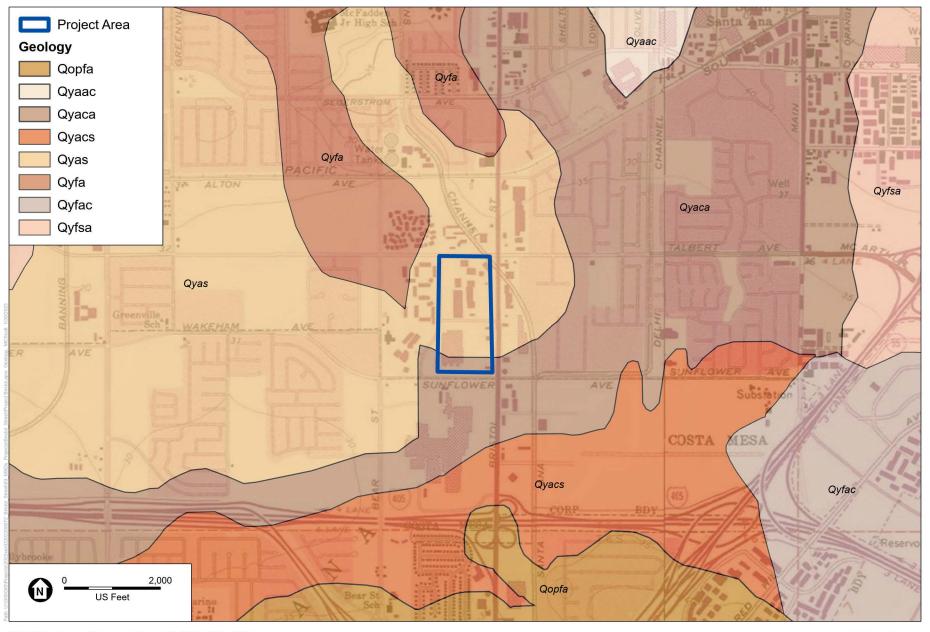
A desktop analysis was undertaken to assess the potential for subsurface archaeological resources within the Project area. Sources reviewed include geologic maps and soil maps, as well as the results of the SCCIC records search, the existing geotechnical report for the Project, and the historic map and aerial review.

Geology

A review of geologic mapping (Langenheim et al. 2006; Morton and Miller 2006) indicates that the entirety of the Project area is underlain by young Quaternary deposits, dating from the Late Holocene to the Late Pleistocene (Qya). While the Late Pleistocene geologic time period predates known human occupation of the region, the Late Holocene is contemporaneous with the duration of known human occupation of the area (**Figure 3**).

Soils

Soils within the Project area are mainly comprised of Omni Silt Loam (approximately 80 percent) and Omni Clay (approximately 20 precent) (websoilsurvey.sc.egov.usda.gov, 2022). Omni soils are very deep, poorly drained soils that formed in mixed sediments and are found on level concave basins (National Cooperative Soil Survey 2007). The typical profile for Omni soil series consists of 0-12 inches of silty clay (Ap horizon) followed by 12-21 inches of silty clay (B21cag



SOURCE: Morton, D.M., and Miller, F.K., 2006; ESA, 2021

Related Bristol

Figure 3 Geology



horizon), followed by 21-27 inches of clay loam (B22g horizon), 27-42 inches of silty clay (A11bg-A12bg horizons), 42-45 inches clay loam (IIC horizon), 45-48 inches silty clay (IIIa1bg horizon), and 48-60 inches silty clay and clay loam (IIIACb3g horizon). A horizons are considered topsoil, when A horizons have been disturbed by plowing, they are referred to as Ap Horizons. B horizons can also be referred to as 'subsoil' and are characterized as the layer of minerals that have leeched out of the above horizons and created a subsoil below. C horizons are described as the portion of the original sediment that has been least affected by pedogenesis. Based on the age of the geologic deposits and the types of soil horizons present, A11bg-A12bg horizons, IIIa1bg horizon, and IIIACb3g horizon all constitute previous stable landforms that could have been conducive to the accumulation of archaeological materials and subsequently covered by later depositional activities

Archaeological sensitivity

As indicated by the SCCIC record search only a small percentage of the Project area and the surrounding half mile has been subjected to previous cultural resource studies. The record search also revealed that three historic period refuse isolates were located approximately 0.4 miles northwest of the Project area and one prehistoric archaeological site was located approximately 0.5 miles south of the Project area.

The historic map and aerial review indicated that the Project area was undeveloped at the turn of the 20th century and by the mid-20th century had developed to mostly include agricultural fields, some disparate roads, and a collection of structures near the center of the Project area. These structures were demolished sometime before 1972 and the area was graded and developed with buildings and surface parking during the 1970s and 1980s. Given the age of these structures, it is unlikely that they had deep foundations or other deep disturbances associated with construction. Grading activities and previous agricultural activities would have likely resulted in disturbances to surficial and shallow soils to depths of approximately 12-18 inches.

Four points of data, all taken together, suggest the Project area is sensitive for prehistoric and historic-period archaeological deposits: the Holocene age of the surficial soils, the presence of previously stable landforms in the soil stratigraphy, the presence of known prehistoric and historic archaeological sites within a 0.5-mile radius of the site, and the historic period, since demolished agriculture related structures located within the Project area. However, disturbances within the Project area associated with construction and activities associated with the development of the site and prior agricultural activities across the Project area, reduce the sensitivity for intact subsurface archeological deposits at depths less than 18 inches.

Cultural Resources Survey

Methods and Results

A cultural resources survey of the Project area was conducted on October 6, 2022 by ESA staff Salpi Bocchieriyan, M.A., RPA. The survey was aimed at identifying archaeological resources within or immediately adjacent to the Project. As the majority of the Project area is developed with structures, parking lots, and sidewalks, areas with visible ground surface were subject to

opportunistic survey, totaling 3 acres. This included planters and other landscaped areas within the parking lots, adjacent to existing structures, and between parking lots and sidewalks. Survey coverage is depicted in **Figure 4**. Surveyed areas, as well as the immediate surroundings, were photographed (**Figure 5** and **Figure 6**). No archaeological resources were recorded as a result of the survey.

Conclusions and Recommendations

Archaeological Resources

As a result of the archival research and archaeological resources survey conducted for the proposed Project, no archaeological resources have been identified within or immediately adjacent to the proposed Project. However, this does not preclude the possibility that subsurface archaeological deposits underlie the Project. However, the Project area is sensitive for prehistoric and historic-period archaeological deposits given the Holocene age of the surficial soils, the presence of previously stable landforms in the soil stratigraphy, the presence of known prehistoric and historic archaeological sites within a 0.5-mile radius of the site, and the former presence of agriculture-related structures located within the Project area. Previously unknown and buried archaeological resources could qualify as historical resources under CEQA, and impacts to any such resources would constitute a significant impact on the environment. As such the following Mitigation Measures are recommended to reduce impacts to less than significant. The measures include one mitigation measure, CUL-6, from the City's GPU PEIR and three additional mitigation measures, MM-CUL-1, -2 and -3 that include additional requirements that are not mentioned in the CUL-6 measure or in other mitigation measures form the City's GPU PEIR.

Mitigation Measure CUL-6: If the archaeological assessment did not identify archaeological resources but found the area to be highly sensitive for archaeological resources, a qualified archaeologist and a Native American monitor approved by a California Native American Tribe identified by the Native American Heritage Commission as culturally affiliated with the project area shall monitor all grounddisturbing construction and pre-construction activities in areas of high sensitivity. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. The Native American monitor shall be invited to participate in this training. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's Standards. This will include tribal consultation and coordination with the Native American monitor in the case of a prehistoric archaeological resource or tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinternment in an area designated by the tribe.

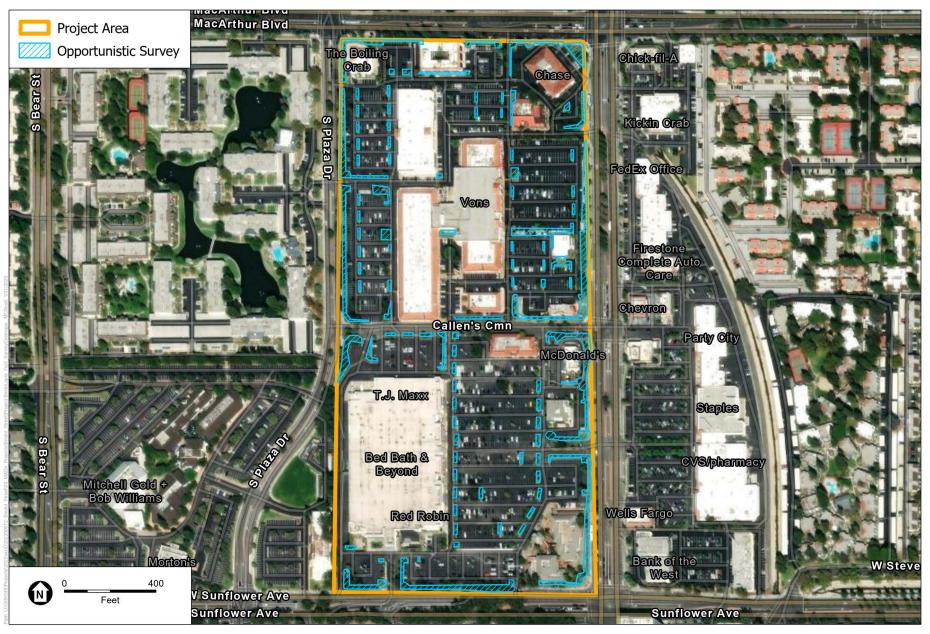


Figure 4
Survey Coverage



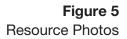




Overview of landscaped planter (view to west)



Detail of landscaped planter









Overview of landscaped northeast corner of Project area (view to northeast)



Detail of landscaped planter



Mitigation Measure MM-CUL-1: If a resource is determined significant, the Project Applicant, qualified archaeologist, and Tribe shall meet and confer regarding the treatment measures and mitigation for such resources. Pursuant to PRC Section 21083.2(b), avoidance is the preferred method of preservation for archaeological resources and may include deeding archaeological resources into permanent conservation easements or planning parks, greenspace, or other open space to incorporate archaeological resources. If preservation in place or avoidance is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis of the artifacts that are recovered. The methods and results of the data recovery excavations shall be included in the monitoring report that is described in Mitigation Measure MM-CUL-2. The report shall include a description of resources recovered, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Construction activities in the immediate vicinity of the discovery can resume once the fieldwork component of the treatment measures has been implemented. These treatment measures and mitigation shall reduce any significant impacts by ensuring that either the resource is preserved in place or is removed prior to its destruction by construction activities.

Mitigation Measure MM-CUL-2: After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring activities, which shall be submitted to the City and to the SCCIC at the University California, Fullerton.

Mitigation Measure MM CUL-3: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to PRC Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Orange County Coroner determines the remains to be Native American, the NAHC must be contacted within 24 hours. The NAHC must then immediately identify the MLD upon receiving notification of the discovery. The MLD shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in PRC Section 5097.98.

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