Appendix C

Extended Phase 1 Archaeological Excavation Report

EXTENDED PHASE 1 ARCHAEOLOGICAL EXCAVATION REPORT ORANGE MEMORIAL PARK WATER CAPTURE PROJECT CITY OF SOUTH SAN FRANCISCO, CALIFORNIA

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SUMMARY OF FINDINGS

The proposed Orange Memorial Park (Park) Water Capture Project (Project) will provide water quality improvements to meet the National Pollutant Discharge and Elimination System (NPDES) requirements of the San Francisco Bay Municipal Regional Stormwater Permit (MRP), which governs stormwater discharges to San Francisco Bay from the City of South San Francisco and 21 other co-permittees in San Mateo County. The Project is designed to address multiple water quality targets outlined in the MRP as well as solid waste (trash) discharge reductions under the MRP requirements.

The proposed Project involves the installation of a drop inlet, diversion channel, and inlet junction structure (trash screen) in the upper and western end of the Colma Creek channel and Park boundary and a series of storm pipes and pretreatment chambers that lead to an underground stormwater storage reservoir in the southeastern corner of the Park underneath a portion of two baseball fields. A portion of the underground stormwater storage reservoir would function as a cistern holding water for future non-potable irrigation and the remainder would function as an infiltration chamber. The proposed Project Area of Potential Effects (APE) includes the horizontal and vertical extent of all temporary and permanent topographic modifications. Ground disturbances associated with the proposed Project will extend at least 10 to 12 feet below the existing ground surface.

An archaeological literature and records search was conducted at the California Historical Resources Information System (CHRIS) Northwest Information Center (NWIC), Sonoma State University for the proposed Project APE, in November 2018. Over 30 investigations have been undertaken within an area extending 0.5-mile from the proposed Project APE; two of these evaluated a portion of the proposed Project APE. Three archaeological resources are located within 0.5-mile from the proposed Project APE, but no resources are recorded within the Project APE.

A Phase 1 archaeological survey (i.e., an intensive, pedestrian ground surface survey) of the proposed Project APE to assess the presence/absence of cultural resources on the ground surface was conducted on January 4, 2019. No prehistoric or historic-period cultural resources were identified, but the potential for unknown subsurface resources that could have been buried by Colma Creek alluviation over the past 10,000 years was determined. Therefore, an Extended Phase 1 Archaeological Excavation including fourteen (14) 2-inch diameter geoprobes was completed to depths between 3.05 and 4.00 meters (10 and 13 feet) below surface throughout the proposed Project APE between March 12 to March 14, 2019. The geoprobes were excavated between 30- and 60-meters (98.5 and 197 feet) apart and were continued until the maximum depth of disturbance was reached. All excavations were supervised by Wood Senior Archaeologist Ken Victorino, RPA.

The current Extended Phase 1 Archaeological Excavation did not identify any prehistoric and historic-period archaeological materials. Intact top soils within the proposed Project APE represent episodes of repeated flooding along Colma Creek or a related creek channel that regularly meandered over time. These intact alluvial soils indicate that ground surfaces within the proposed Project APE were not occupied throughout prehistory or since Euro-American settlement. Therefore, the proposed Project will not have significant impacts on cultural resources and no further archaeological measures including construction monitoring are necessary.

In the unlikely event that unanticipated cultural resources are encountered during proposed Project activities, all work shall stop until a qualified archaeologist can evaluate the nature and significance of the find. In the highly unlikely event that human remains are discovered during proposed Project activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.

EXTENDED PHASE 1 ARCHAEOLOGICAL EXCAVATION REPORT

1.0 INTRODUCTION

The proposed Water Capture Project (Project) is a water quality improvement project within Orange Memorial Park (Park) in the City of South San Francisco, California (Figures 1 and 2). Ground disturbances associated with the proposed Project will extend at least 10 to 12 feet below the existing ground surface. This report documents the background research, Phase 1 Archaeological (ground surface) Survey, Extended Phase 1 Archaeological Excavation, and Native American consultation conducted for the proposed Project by Wood Environment and Infrastructure Solutions (Wood E&IS) Cultural Resources Manager David Stone, RPA, and Wood E&IS Senior Archaeologist Ken Victorino, RPA. Mr. Stone has more than 35 years of experience managing all phases of cultural resource investigations throughout California. Mr. Victorino has more than 22 years of experience conducting all phases of cultural resource investigations throughout California.

2.0 PROJECT LOCATION AND DESCRIPTION

The proposed Project Area of Potential Effect (APE) is located within the Park, between West Orange Avenue and Chestnut Avenue, just east of El Camino Real, in the City of South San Francisco, on the *San Francisco South*, California U.S. Geological Survey (USGS) 7.5' topographic quadrangle (see Figure 1). The proposed Project APE is located within approximately 1.5 acres of the 28-acre Park, along the Colma Creek channel, within the southern half of the Park (Figure 3).

The City of South San Francisco is proposing water quality improvements within the Park that would capture and divert water flows from Colma Creek to the two existing ballfields for treatment and reuse to satisfy local irrigation demands. The proposed Project includes the following improvements (see Figure 2):

- Drop inlet, diversion channel, and inlet junction structure (trash screen) in the upper and western end of the Colma Creek channel and just outside of the western Park boundary, within the Cal Water Property (Southern Greenhouse Parcel) south of Colma Creek;
- 24-inch, underground storm drain pipe that extends from the Cal Water Property (Southern Greenhouse Parcel) south of Colma Creek, parallel to the creek channel, through the picnic area to the southeastern end of the Park;
- A series of pretreatment chambers leading to an underground stormwater storage reservoir within the baseball fields in the southeastern portion of the Park;
- Irrigation pump, water quality equipment shed, and irrigation within the picnic area; and
- Regrading of the southernmost portion of the Park, within the baseball fields.

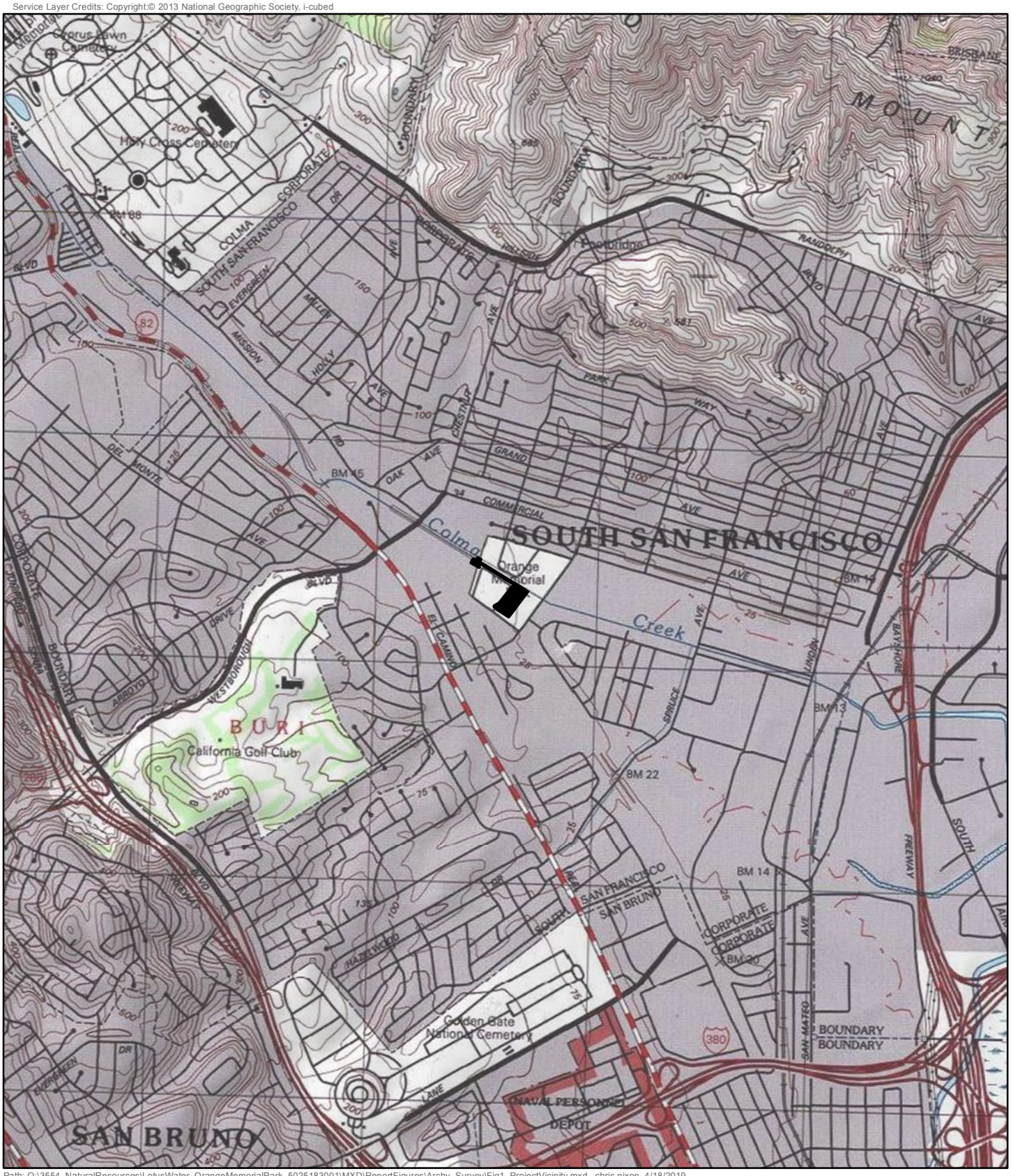
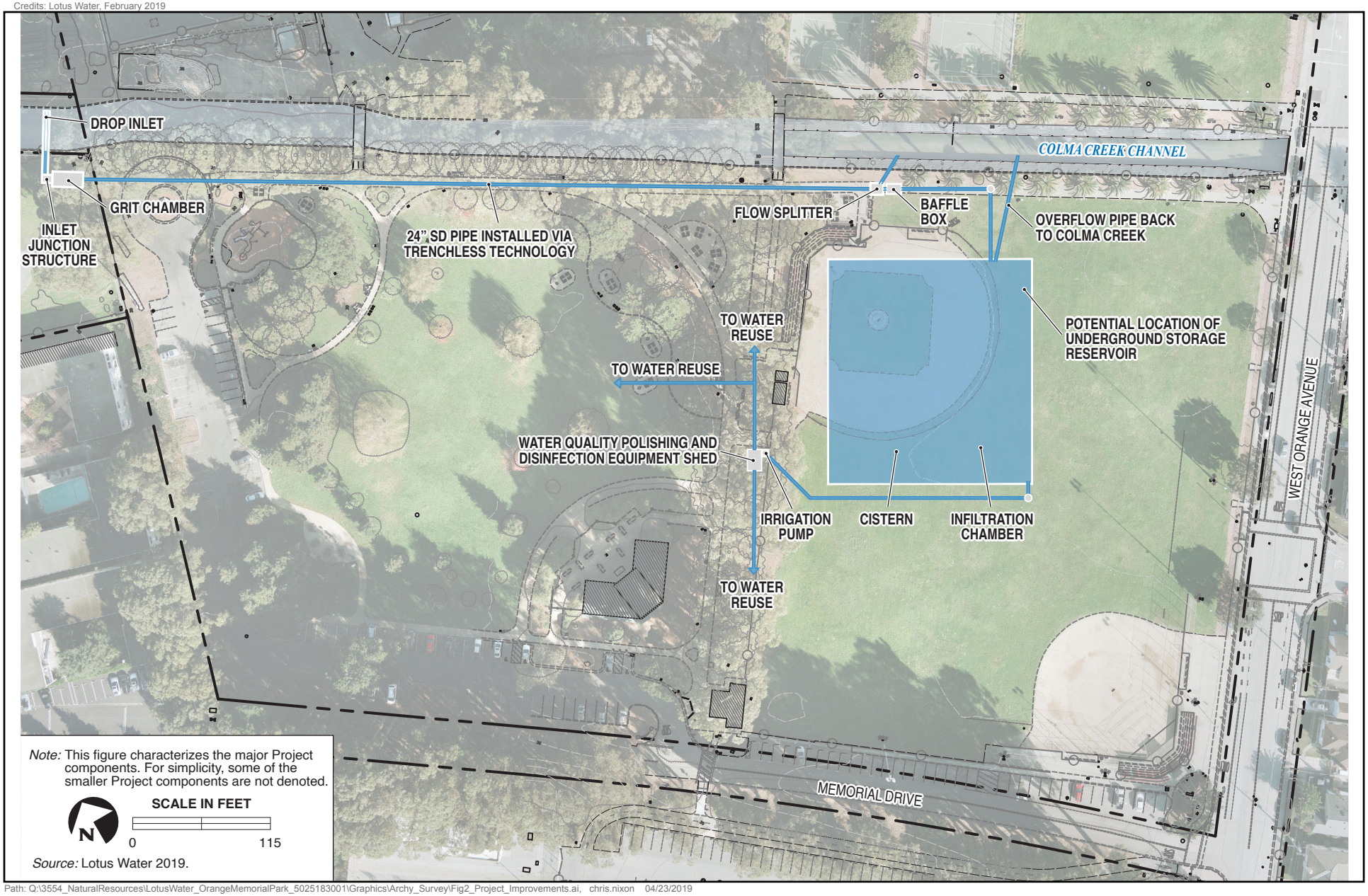


FIGURE 1

Project Vicinity
Orange Memorial Park
South San Francisco, CA

Credits: Lotus Water, February 2019



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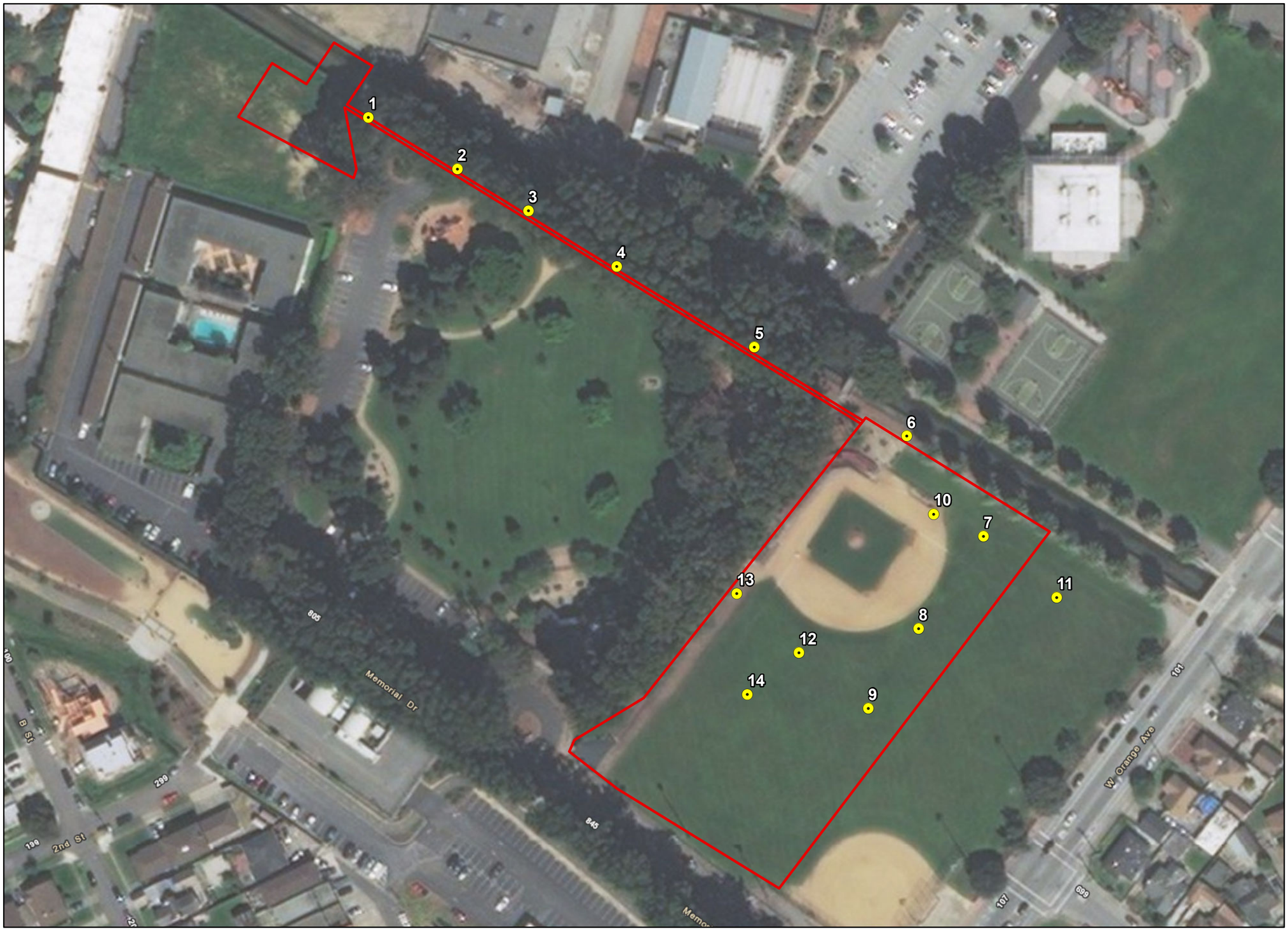
wood.

FIGURE 2

Project Improvements
Orange Memorial Park
South San Francisco, CA



Area of Potential Effect

Extended Phase 1 Geoprobe Location

1 inch = 100 feet

0 100 Feet

FIGURE 3

Area of Potential Effect and
Extended Phase 1 Geoprobe Locations
Orange Memorial Park
South San Francisco, CA

wood.

Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors
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The proposed improvements comprise the APE that includes the horizontal and vertical extent of all temporary and permanent topographic modifications. Ground disturbances associated with the proposed Project will extend 10 to 12 feet below the existing ground surface.

3.0 BACKGROUND

3.1 Environment

Existing development within the proposed Project APE consists of park facilities including baseball fields and open picnic areas. A small portion of the proposed Project APE is located just outside of the western Park boundary, within the Cal Water Property (Southern Greenhouse Parcel). The proposed Project is surrounded by residential development in all directions.

Several geological soil testing investigations within portions of the proposed Project APE indicated that Colma Creek or related meandering water courses deposited substantial layers of alluvial sediment including sands, gravel and silts during periods of excessive rainfall and subsequent runoff. These are summarized below.

A Site Assessment was conducted in the Cal Water Property (Southern Greenhouse Parcel) just west of the Park boundary (CSS 2012). The assessment determined that up to 2 feet of fill had been placed on top of intact, native soils. The imported fill was generally described as dark brown, brown, or strong brown sand with varying amounts of silt, clay, and gravel. The intact, native soil underlying the fill consisted of yellowish brown to dark yellowish-brown fine sand with a trace of silt, identified as alluvial sediments deposited by Colma Creek or a related water course. This intact, native soil extended to 20 feet below surface, “interrupted only by a 3- to 6-inch lens of reddish brown medium sand below 10 feet and occasional deeper, thin (2- to 6-inch) clay lenses interbedded with the yellowish brown sand.”

A Preliminary Geotechnical Feasibility Study was conducted in the Cal Water Property (Southern Greenhouse Parcel) for the proposed Project (Fugro 2016). Three borings generally encountered fill overlying native poorly-graded sands with alluvial clay and silty sand with clay over clay with sand. Boring B-1 encountered approximately 2 feet of fill (poorly-graded sand with gravel and clay) overlying approximately 18 feet of poorly-graded sands and silt sands. Boring B-2 encountered approximately 1 foot of fill (poorly-graded sand with gravel and silt) overlying approximately 17.5 feet of poorly-graded sands with silt. Boring B-3 encountered approximately 2.5 feet of fill

(poorly-graded sand with gravel and silt) overlying approximately 17.5 feet of poorly-graded sand with silt. The soils again are a result of creek or related drainage deposition.

A Geotechnical Investigation conducted for the proposed Project (Cotton, Shires, and Associates, Inc. 2018) included borings within the baseball fields in the southern portion of the Park. Four soil borings, B-4, B-5, B-6, and B-7, were completed in the proposed Project APE within the baseball fields. The borings indicated, generally, a 4.5- to 5-foot thick layer of clayey fill overlying alluvial sands, and silty or clayey sands within the baseball fields. Soil boring B-4 was located in the northern corner of the baseball fields and encountered dark brown sandy clay fill soil from the ground surface to 4.5 feet below surface and alluvium composed of silty sand, clay, sandy clay, and clayey sand from 4.5 to 46.5 feet below surface. Soil boring B-5 was located in the eastern corner of the ballfields and encountered dark brown silty clay fill soil from the ground surface to 4.5 feet below surface and alluvium composed of layers of sand, silty sand, sandy silty clay, and clayey sand from 4.5 to 31.5 feet below surface. Soil boring B-6 was located in the western corner of the ballfields and encountered dark brown sandy clay fill soil from the ground surface to 4.5 feet below surface and alluvium composed of layers of sand, silty sand, and clayey sand from 4.5 to 33.5 feet below surface. Soil boring B-7 was located in the southern corner of the ballfields and encountered brown sandy silt clay fill soil from the ground surface to 5.0 feet below surface and alluvium composed of sand, silty sand, clay, and clayey sand from 5.0 to 38.5 feet below surface.

These investigations are internally consistent in describing a broad area of active alluvial deposition throughout the proposed Project APE over the past several millennia. They illustrate the presence of repeated flooding resulting in dynamic silts, sands, and cobble layered stratigraphy. Vegetation in this type of floodway would be ephemeral and not generally support long-lasting riparian species such as oaks, sycamores and understory shrubs. The environmental context of the proposed Project APE would have encouraged specific resource procurement such as hunting, fishing, or vegetation collection.

3.2 Ethnography

At the time of the initial European contact with the Native Americans of the San Francisco Bay area, the Costanoans (from the Spanish *costaños*, or “coast people”), members of the Penutian linguistic family, inhabited the area from the Carquinez Strait and the northern tip of the San Francisco Peninsula to the region south of Monterey Bay and east to the Diablo Range (Levy 1978). The Costanoans, who called themselves Ohlone, entered the Bay Area from the Delta region approximately 1,500 years ago and displaced earlier Hokan speakers.

Ohlone social organization was based on the tribelet, which consisted of one to five villages and numerous smaller, temporary settlements within a recognized territory (Levy 1978, Milliken 1995, Moratto 1984). Larger tribelets usually had several permanent villages, frequently within close proximity to one another. Tribelet leadership was focused on a chief who attained the position through patrilineal inheritance and a council of elders who served as advisors (Harrington 1933). Territorial boundaries of tribelets were defined by physiographic features.

The Ohlone exploited the San Francisco Bay area's diverse ecology throughout the seasons. At various seasons, parties were sent out from the villages to temporary camps at scattered locations in the tribelet territory to hunt, fish, and gather plant foods (Levy 1978). A large variety of terrestrial animals such as deer, antelope, and elk were hunted using a sinew-backed bow and arrows tipped with stone or bone points. Waterfowl were the most important birds in their diet. Nets were used to capture ducks, quail, rabbits, and small schooling fish (Levy 1978). Tule balsas, used to cross San Francisco Bay and travel through the marshes and streams surrounding the Bay, were also utilized in hunting waterfowl. Acorns were mostly likely an important plant resource along with other nut and seed crops.

The most common type of dwelling was a domed structure with a bent-pole frame that was thatched with tule, grass, wild alfalfa, or ferns (Levy 1978). Sweathouses were substantial semi-subterranean structures with timbered sides located within the permanent villages. The Portolá expedition was impressed by a large assembly house on Gazos Creek that was a domed structure large enough to accommodate all 200 inhabitants of the Ohlone village (Crespí 1927). Assembly houses were located in the center of the village with dwellings around them.

3.3 Prehistory

Archaeological remains related to the prehistoric occupation of the San Francisco Bay area are evidenced by shellmounds that lined the shores of the Bay. Prehistoric adaptations of the Bay area (Fredrickson 1974, Moratto 1984) are summarized below.

Paleo-Indian Period (10,000 to 6,000 B.C.)

The earliest well-documented entry and spread of humans in California occurred at the beginning of the Paleo-Indian Period. Social units were small and highly mobile. Known sites have been identified in the contexts of

ancient lake shores and coastlines evidenced by fluted projectile points and chipped stone crescent hunting implements.

Lower Archaic Period (6,000 to 3,000 B.C.)

Few archaeological sites have been found in the Bay Area that date to the Lower Archaic Period. The lack of sites may be because of high sedimentation rates of adjacent water courses, leaving sites deeply buried and inaccessible (Fredrickson 1974, Moratto 1984).

Middle Archaic Period (3,000 to 500 B.C.)

Archaeologists have recovered a great deal of data from sites occupied by the Middle Archaic Period. During the Middle Archaic Period, the broad regional patterns of foraging subsistence strategies were followed by more intensive procurement practices. Subsistence economies were more diversified, possibly including the introduction of acorn processing technology, as well as use of the dart and atlatl for hunting. Populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways.

Upper Archaic Period (500 B.C. to A.D. 700)

The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period. Exchange systems become more complex and formalized and evidence of regular, sustained trade between groups was seen for the first time.

Emergent Period (A.D. 700 to 1800)

Several technological and social changes characterized the Emergent Period. The bow and arrow were introduced, replacing the dart and atlatl over time. Territorial boundaries between groups became well-established. Increasing distinctions in an individual's social status were linked to acquired wealth. Exchange of goods between groups became more regularized with more goods, including raw materials, entering into the exchange networks. Exchange relations became highly regularized and sophisticated in the latter part of this period. The clamshell disk bead became a monetary unit for exchange, and increasing quantities of goods moved greater distances and specialists developed that influenced various aspects of production and exchange.

3.4 History

An estimated 7,000 to 10,000 Native Americans lived near San Francisco Bay by the time of European contact in the 18th century (Levy 1978). Spanish explorers were the first Europeans to traverse the San Francisco Peninsula. In 1769 Gaspar de Portola led an expedition that began the Spanish exploration of northern California; however, it was Juan Bautista De Anza who received orders from the Viceroy of Mexico in 1775 to establish a mission in San Francisco. The arrival of the Spanish in northern California led to the rapid demise of the local Native American population. The native way of life was destroyed by disease, declining birth rates, and the establishment of the Mission San Francisco de Asís in 1776. By 1832, the Native American population had been reduced by approximately 80 percent. The surviving Costanoan's along with neighboring groups, were forced into the missions and turned into agricultural laborers. With the abandonment of the mission system by the Mexicans, ranchos were established and the few remaining Native Americans worked on the ranchos.

During the 1830s and 1840s, settlers in search of large expanses of land or trappers in search of fur-bearing animals began to occupy California in large numbers. Tension between the settlers and Native Americans escalated during the Mexican War in 1846, ending with the signing of the Treaty of Guadalupe Hidalgo in 1848.

The Gold Rush had a large impact on San Francisco, as the city became the main port, transportation hub, and commercial center for new settlers looking for their fortune. Prior to 1860, the main form of transportation throughout the San Francisco Bay area was by boat or stagecoach. The first roads were constructed in the mid-19th century and these roads were primarily used to transport agricultural products to market. A maritime transportation network grew up around the economy of the Bay area to facilitate the movement of agricultural products.

In 1864, the construction of the San Francisco-San Jose Railroad and the organization of the Southern Pacific Railroad Company created a link between communities. The railroad also spurred the development of new towns.

4.0 SOURCES CONSULTED

This section describes the results of the records search conducted at the regional Information Center for the California Historical Resources Information System (CHRIS). It also summarizes correspondence with the Native American Heritage Commission (NAHC) regarding the proposed Project.

4.1 Cultural Resources Records Search

An archaeological site record and literature search was conducted at the CHRIS Northwest Information Center (NWIC) at Sonoma State University for the proposed Project APE on November 2, 2018 (Appendix A). Other sources consulted for resources within the APE include the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks, California Points of Historical Interest, and California Inventory of Historic Resources.

Over 30 investigations have been undertaken within an area extending 0.5-mile from the proposed Project APE. Two of these covered small portions of the proposed Project APE. A cultural resources evaluation, consisting of background research and a surface reconnaissance, was conducted for a sewer replacement project that passed through the Park, along Colma Creek (Chavez 1977). No prehistoric or historic-period resources were observed, and the assessment concluded that the project would have no adverse effects on known cultural resources.

Background research and an intensive archaeological reconnaissance were conducted as part of the Orange Memorial Park Master Plan Environmental Impact Report (EIR) (Clark 1992). The Master Plan EIR included areas north of Colma Creek, outside the proposed Project APE, but also the creek channel and the Cal Water Property (Southern Greenhouse Parcel) within the proposed Project APE. The ground surface within Master Plan EIR areas was covered by imported fill soil, asphalt, and/or concrete. No evidence of cultural materials was observed within the proposed Project APE.

No cultural resources are recorded within the proposed Project APE. Three resources are documented within 0.5-mile of the proposed Project APE (Table 1).

Table 1. Archaeological Resources within 0.5 Mile of Proposed Project APE

Primary No.	*Trinomial*	*Distance / Direction from APE*	*Period of Occupation*	*Site Type*
P-41-000048	CA-SMA-44	1,750 ft., southeast	prehistoric	unknown
P-41-000409	CA-SMA-299	2,550 ft., northwest	prehistoric	habitation debris
P-41-000495	CA-SMA-355	650 ft., northwest	prehistoric	habitation debris including hearths/pits

P-41-000048 (CA-SMA-44)

The site is located approximately 535 meters (1,755 feet) southeast of the proposed Project APE. The Archaeological Site Survey Record for the site does not provide any information (no size measurements, no description of archaeological materials, no sketch map). The site was most likely recorded by Nelson in 1909 along with other shell mounds in the San Francisco Bay area (personal communication, Blake Brown, Northwest Information Center). Because the site was recorded over 100 years ago, very little information about the site remains; the site location depicted by the NWIC is considered approximate (personal communication, Blake Brown, Northwest Information Center).

P-41-000409 (CA-SMA-299)

The site is located approximately 775 meters (2,542 feet) northwest of the proposed Project APE, near the intersection of Colma Creek and the Southern Pacific Railroad tracks. The site was originally documented in 1989 as an approximately 2-kilometer (1.2-mile) long shell midden with traces of shell fragments, fire-altered rock, and chipped stone flakes on the surface. The Archeological Site Record indicates the site was "completely destroyed" with no traces of the site in many areas. An investigation for the BART – San Francisco Airport Extension Project (Rice 1994) identified no evidence of the site on the recorded site ground surface. Additionally, 20 shovel auger tests encountered no subsurface materials. The Archaeological Site Record indicates the site was "completely disturbed."

P-41-000495 (CA-SMA-355)

The site is located approximately 200 meters (656 feet) northwest of the proposed Project APE, along the north bank of Colma Creek. It consists of prehistoric habitation debris, including midden soil, burned and fire-cracked rock, charcoal, chert flakes, ground stone fragments, and burned and unburned bone in a roughly 185 X 80-meter (607 X 262-foot) area, and is between 10 and 130 centimeters (4 and 51 inches) thick. The archaeological resource was buried below 1.5 to 7.3 meters (4.9 to 24.0 feet) of natural and artificial overburden and was discovered during auger testing for a proposed building project.

The archaeological site record and literature search indicates prehistoric occupation occurred along Colma Creek within 0.5 mile of the proposed Project APE. Understanding of CA-SMA-44 is extremely limited, but CA-SMA-299 and -355 represent temporary or seasonal campsites within the vicinity of Colma Creek. Both have been buried by alluvial sediments carried by the creek. Although previous soil testing within the proposed Project APE has suggested dynamic

alluvial sedimentation over time, the potential for *in situ* (i.e., in the original depositional location) cultural resources within proposed improvement areas exist.

4.2 Native American Consultation

A search of the Native American Heritage Commission's (NAHC's) Sacred Lands File was requested on October 10, 2018, and conducted on November 5, 2018 (Gayle Totton, NAHC Associate Governmental Program Analyst) to determine the presence of any Native American tribal heritage resources within the APE and general vicinity (Appendix B). The NAHC indicated that Native American tribal heritage sites are not recorded within the proposed Project APE or vicinity. The NAHC identified seven Native American contacts, both tribes and bands, that would potentially have specific knowledge as to whether cultural resources are identified in the APE. The list of contacts is provided below:

- Amah Mutsun Tribal Band, Valentin Lopez, Chairperson
- Amah Mutsun Tribal Band, Edward Ketchum
- Amah Mutsun Tribal Band of Mission San Juan Bautista, Irenne Zwierlein, Chairperson
- Costanoan Rumsen Carmel Tribe, Tony Cerda, Chairperson
- Indian Canyon Mutsun Band of Costanoan, Ann Marie Sayers, Chairperson
- Muwekma Ohlone Indian Tribe of the SF Bay Area, Charlene Nijmeh, Chairperson
- The Ohlone Indian Tribe, Andrew Galvan

5.0 FIELD METHODS

5.1 Phase 1 Archaeological Survey

A Phase 1 archaeological survey (i.e., an intensive, pedestrian ground surface survey) of the proposed Project APE to assess the presence/absence of cultural resources to identify potential impacts associated with the proposed project was conducted on January 4, 2019. Results are summarized for each of the proposed Project APE components.

Cal Water Property (Southern Greenhouse Parcel)

Proposed ground disturbing activities for the installation of the drop inlet would be located within the existing Colma Creek channel (see Figure 2). Installation of the proposed diversion channel and inlet junction structure (trash screen) are located within an undeveloped field. Background research indicated that fill soil up to 2 feet thick was placed within this area (CSS 2012). Ground surfaces within this area were partially covered by annual grasses and eucalyptus leaf litter, providing

good to very good (60 to 80 percent) ground surface visibility. A storm drain and construction debris (concrete) were observed within this area, indicating past ground disturbing activities. Exposed soils within this area were comprised of yellowish-brown sandy loam in the northeast corner of the parcel and brown sandy loam in the center of the parcel, consistent with the results of the previous geological Site Assessment (CSS 2012).

Picnic Area

Proposed ground disturbing activities within the picnic area include the installation of a 24-inch, underground storm drain pipe that will extend east from the inlet junction structure on the Cal Water Property (Southern Greenhouse Parcel) through the existing picnic area, to the baseball fields (see Figure 2). The proposed storm drain pipe will be oriented parallel with Colma Creek. Ground surfaces within this area were partially covered by a playground and grass turf. Evidence of past grading for water drainage is visible in elevation changes around the playground and planted trees. Substantial areas of barren ground surface approximately 1-square meter in size were observed within the grass turf, resulting in very good to complete (70 to 100 percent) ground surface visibility. Evidence of past ground disturbing activities including a storm drain manhole and irrigation control boxes were observed within the proposed Project APE. Soils observed were yellowish brown and brown sandy loam.

Additional existing disturbances included the installation of irrigation within the northern half of the picnic area. Ground surfaces within the area are partially covered by grass turf and eucalyptus leaf litter within landscaped areas. Within the areas of grass turf, approximately 1-square meter of ground surface was visible every 2 square meters. In areas of heavy leaf litter, shovel scrapes were performed at 3-meter (9.8-foot) intervals in order to increase ground surface visibility, providing excellent (90 percent) ground surface visibility. Soils observed were comprised of yellowish brown and brown sandy loam.

Baseball Fields

Proposed ground disturbing activities within the existing baseball fields include the installation of a series of filtration chambers connected to the 24-inch, underground storm drain pipe that flows into underground stormwater storage chambers, a water quality equipment shed with an irrigation pump, new irrigation, and regrading of the baseball fields (see Figure 2). There was no ground surface visibility within the majority of the proposed Project APE; ground surface visibility was precluded by healthy grass turf that was in good condition due to recent rainfall and imported dirt used for the baseball infields. Ground surfaces outside of the periphery of the proposed Project APE were also inspected. The ground surface within these areas was covered by wood chips. In order to improve ground surface visibility in areas covered by wood chips, 0.5 X 0.5-meter exposures were

completed approximately every 3 meters (9.8 feet), providing excellent (90 percent) ground surface visibility. The ground surface along the western edge of the proposed Project APE within the area of the proposed water quality equipment shed and irrigation pump was partially covered by spotty grass turf, resulting in excellent (80 to 90 percent) ground surface visibility.

Soils observed included redeposited fill soil consisting of brown, light brown, and yellowish-brown clayey sand and sandy loam. Small yellowish-brown clay nodules were observed within the fill soil. These results are consistent with the previous Geotechnical Investigation (Cotton, Shires, and Associates, Inc. 2018).

5.2 Extended Phase 1 Archaeological Excavation

An Extended Phase 1 Archaeological Excavation was conducted to evaluate the potential for buried prehistoric archaeological materials for the following reasons: the presence of fill soil that has been placed in proposed Project improvement areas within the Park; potential alluvial deposition as identified in previous soil investigations, and; the presence of at least two prehistoric campsites sites within 0.5-mile of the proposed Project area.

Methods

Fourteen (14) solid core geoprobes, 2-inches in diameter, were excavated throughout the proposed Project APE to recover continuous soil cores up to 12-feet deep, the maximum depth of proposed Project disturbance. The geoprobes were spaced between approximately 30 and 60 meters (98.5 and 197 feet) apart (see Figure 3). Excavated soils were inspected by Ken Victorino, RPA, Wood E&IS Senior Archaeologist, and Lucas Nichols, Wood E&IS Staff Archaeologist, for the presence of prehistoric archaeological material. Screening of soils was anticipated in the event that any cultural resources were observed. Results of geoprobe excavations were documented on forms; provenience information, sediment description, and termination depth were noted (Appendix C). After excavation of a geoprobe was completed, the geoprobe hole was backfilled.

Results

The Extended Phase 1 Archaeological Excavation results are summarized in Table 2 below. Fill soil overlies intact, native soils. This soil profile/stratigraphy is consistent with previous geotechnical investigations conducted for the proposed Project. The intact, native soils represent multiple “fining upward” sequences associated with repeated flooding along Colma Creek, or suggest that the Colma Creek channel meandered and changed locations. A single “fining upward” sequence consists of large course sand at the bottom, then medium and fine sand, and fine clay sediment at the top. The heavier, large course sand is deposited first, at the beginning, when the water is flowing quickly, and the lighter, fine clay

Table 2. Extended Phase 1 Archaeological Excavation Results

Geoprobe	*Depth of Excavation (m/ft)*	*Soil Description*	*Cultural Materials*
1	0 – 0.47 / 0 – 1.5	disturbed, "mixed in place" native sediment	-
	0.94 – 4.00 / 1.5 – 13.1	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
2	0 – 0.54 / 0 – 1.8	fill	-
	0.54 – 1.85 / 1.8 – 6.1	potential fill: abrupt transition and distinct color change at 1.85 m (6.1 ft) suggest sediment is potentially fill	-
	1.85 – 4.00 / 6.1 – 13.1	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
3	0 – 0.85 / 0 – 2.8	fill	-
	0.85 – 2.36 / 2.8 – 7.7	potential fill: mixed/mottled transition at 2.36 m (7.7 ft) suggests sediment is potentially fill that may have been pushed into underlying intact sediment when placed	-
	2.36 – 3.97 / 7.7 – 13.0	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
4	0 – 0.68 /0 – 2.1	fill	-
	0.68 – 2.30 / 2.1 – 7.6	potential fill: mixed/mottled transition at 2.30 m (7.6 ft) suggests sediment is potentially fill that may have been pushed into underlying intact sediment when placed	-
	2.30 – 3.98 / 7.6 – 13.1	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
5	0 – 1.79 / 0 – 5.9	fill	-
	1.79 – 2.11 / 5.9 – 6.9	potential fill: mixing/mottling suggests sediment is potentially fill	-
	2.11 – 3.97 / 6.9 – 13.0	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
6	0 – 0.94 / 0 – 3.1	fill	-
	0.94 – 3.15 / 3.1 – 10.3	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-

Table 2. Extended Phase 1 Archaeological Excavation Results (continued)

Geoprobe	*Depth of Excavation (m/ft)*	*Soil Description*	*Cultural Materials*
7	0 – 1.14 / 0 – 3.7	fill	-
	1.14 – 1.21 / 3.7 – 4.0	potential fill	-
	1.21 – 3.25 / 4.0 – 10.7	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
8	0 – 0.91 / 0 – 3.0	fill	-
	0.91 – 3.05 / 3.0 – 10.0	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
9	0 – 0.96 / 0 – 3.2	fill	-
	0.96 – 3.40 / 3.2 – 11.2	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
10	0 – 1.51 / 0 – 5,0	fill	-
	1.51 – 3.70 / 5.0 – 12.1	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
11	0 – 1.02 / 0 – 3.4	fill	-
	1.02 – 3.63 / 3.4 – 11.9	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
	3.63 – 3.75 / 11.9 – 12.3	intact, native gley sediments; possibly "slough" covered by stagnant or slow-moving water	-
12	0 – 0.83 / 0 – 2.7	fill	-
	0.83 – 3.52 / 2.7 – 11.6	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
	3.52 – 3.61 / 11.6 – 11.8	intact, native gley sediment; possibly "slough" covered by stagnant or slow-moving water	-
13	0 – 0.90 / 0 – 3.0	fill	-
	0.90 – 3.32 / 3.0 – 10.9	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-
14	0 – 0.53 / 0 – 1.7	fill	-
	0.53 – 3.70 / 1.7 – 12.1	intact, native sediment; multiple "fining upward" sequences of finer-grained clay sediments overlying coarse-grained sand sediments	-

sediments are deposited last, at the end, when the water flow has decreased, and the water is calm and flowing slowly.

These multiple "fining upward" sequences suggest that a stable ground surface, that was exposed for a long period of time and was suitable for prehistoric occupation, was not present within the proposed Project APE. No cultural materials were observed in any of the geoprobe cores such that soil screening was not necessary.

6.0 STUDY FINDINGS AND CONCLUSIONS

As described above, proposed Project improvements will extend into intact, top soils underlying fill soil. The excavation of 14 geoprobes encountered intact, undisturbed alluvial soil consisting of multiple "fining upward" sequences. This soil profile/stratigraphy is consistent with previous geotechnical investigations conducted for the proposed Project. These intact subsoils associated with repeated flooding along Colma Creek or a meandering channel that changed location have a very low potential for the presence of prehistoric archaeological sites, as a ground surface would not have been exposed long enough to develop into a stable surface suitable for prehistoric occupation. Evidence of ephemeral prehistoric occupation associated with special use activities such as hunting, fishing, or vegetation gathering would have been eroded and carried downstream.

The Extended Phase 1 Archaeological Excavation did not recovery prehistoric or historic-period archaeological materials from any of the soil recovered during the excavation of 14 geoprobes, confirming the proposed Project APE has a low potential for the presence of prehistoric archaeological sites.

No further archaeological measures, including monitoring during proposed Project construction, are recommended.

7.0 OTHER RESOURCES

Unidentified Cultural Resources

In the unlikely event that unanticipated cultural resources are discovered during proposed Project activities, all work shall stop until a qualified archaeologist can assess the significance of the find.

In the unlikely event that human remains are discovered during proposed Project activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Coroner has made findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.

8.0 REFERENCES

Chavez, David

1977 Cultural Resources Evaluation of the Colma Wastewater Collection System, Town of Colma, San Mateo County, California. Prepared for Spectrum Northwest and Resources Engineering and Management.

Clark, Matthew A.

1992 Initial Archaeological Evaluation of Proposed Park Additions and a Portion of the Colma Creek Channel for the Orange Memorial Park Master Plan EIR, South San Francisco, California. Prepared for Martin Carpenter Associates.

Cotton, Shires and Associates, Inc.

2018 Geotechnical Investigation Stormwater Capture Project, Orange Memorial Park, South San Francisco, California. Prepared for Lotus Water.

Crespí, Juan

1927 Fray Juan Crespí: Missionary Explorer on the Pacific Coast 1769-1774. Herbert E. Bolton, ed. And trans. Berkeley: University of California Press. Reprinted AMS Press, New York, 1971).

CSS Environmental Services, Inc. (CSS)

2012 Final Site Assessment Report For Parcels Northwest of Orange Park, APNs 014-041-170 and -180, South San Francisco, California, SMCo Site #559204, Global ID #T10000002366. Prepared for County of San Mateo Health Department.

Fredrickson, David A.

1974 Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1:41-53.

Fugro Consultants, Inc. (Fugro)

2016 Preliminary Geotechnical Feasibility Study, Proposed Orange Park Storm Water Capture Project, South San Francisco, California. Prepared for City of South San Francisco.

Harrington, J. P.

1933 Report of fieldwork on Indians of Monterey and San Benito Counties. Washington D.C., *Smithsonian Institute, Bureau of American Ethnology Annual Report for 1931-1932: 2-3*

Levy, Richard

1978 Costanoan. In *California*. Handbook of North American Indians, Volume 8, edited by Robert F. Heizer, pp. 398-413. Smithsonian Institution, Washington, D.C.

Milliken, Randall T.

1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Region, 1769-1810*. Ballena Press, Menlo Park, California.

Moratto, Michael, J.

1984 *California Archaeology*. Academic Press.

Rice, Carolyn

1994 Archaeological Site Record Supplement, CA-SMA-299. On file, CHRIS/NWIC, Sonoma State University, Rohnert Park.

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APPENDIX A

Northwest Information Center Archaeological Site Record and Literature Search

CONFIDENTIAL – NOT FOR PUBLIC DISTRIBUTION

California Historical Resources Information System

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 514 **IC FILE NO.:** _____

To: Northwest Information Center

Print Name: Ken Victorino Date: 10/30/18

Affiliation: Wood Environment & Infrastructure Solutions

Address: 104 W. Anapamu Street, Suite 204A

City: Santa Barbara State: CA Zip: 93101

Phone: (805) 962-0992 Fax: (805) 966-1706 Email: ken.victorino@woodplc.com

Billing Address (if different than above): _____

Project Name / Reference: Orange Memorial Park (5025183001.01.****)

Project Street Address: _____

County: San Mateo

Township/Range/UTMs: _____

USGS 7.5' Quad(s): South Francisco South

PRIORITY RESPONSE (Additional Fee): yes ◉ / no ○

TOTAL FEE NOT TO EXCEED: $_____

Special Instructions:

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ○ / no ○

Notes: _____

CHRIS Data Request Form

Include the following information (mark as necessary) for the records search area(s) shown on the attached map(s) or included in the associated shapefiles. Shapefiles are the current CHRIS standard format for digital spatial data products.

NOTE: All digital data products are subject to availability - check with the appropriate Information Center.

1. **Map Type Desired:** Digital map products will be provided only if they are available at the time of this request. *Regardless of what is requested*, only hard copy hand-drawn maps will be provided for any part of the requested search area for which digital map products are not available at the time of this request.
There is an additional charge for shapefiles, whether they are provided with or without Custom GIS Maps.

Mark one map choice only

Custom GIS Maps ⊙ Shapefiles ○ Custom GIS Maps **and** Shapefiles ○ Hard Copy Hand-Drawn Maps **only** ○

Any selection below left unmarked will be considered a "no. "

2a.	Within project area	Within 1/2 mi radius
ARCHAEOLOGICAL Resource Locations+	yes⊙/ no○	yes⊙/ no○
NON-ARCHAEOLOGICAL Resource Locations	yes○/ no○	yes○/ no○
Report Locations+	yes⊙/ no○	yes⊙/ no○
Resource Database Printout* (list)	yes⊙/ no○	yes⊙/ no○
Resource Database Printout* (detail)	yes○/ no○	yes○/ no○
Resource Digital Database Records (spreadsheet)+	yes⊙/ no○	yes⊙/ no○
Report Database Printout* (list)	yes⊙/ no○	yes⊙/ no○
Report Database Printout* (detail)	yes○/ no○	yes○/ no○
Report Digital Database Records (spreadsheet)+	yes⊙/ no○	yes⊙/ no○
ARCHAEOLOGICAL Resource Record copies+*	yes⊙/ no○	yes○/ no⊙
PDF⊙/ Hard Copy○		
NON-ARCHAEOLOGICAL Resource Record copies*	yes○/ no○	yes○/ no○
PDF○/ Hard Copy○		
Report copies+*:	yes⊙/ no○	yes○/ no⊙
PDF⊙/ Hard Copy○		
	Only directory listing	Associated documentation
OHP Historic Properties Directory**		
within project area	yes⊙/ no○	yes○/ no○
within 1/2 mi radius	yes⊙/ no○	yes○/ no○
OHP Archaeological Determinations of Eligibility+		
within project area	yes⊙/ no○	yes○/ no○
within 1/2 mi radius	yes⊙/ no○	yes○/ no○
***California Inventory of Historical Resources* (1976):**		
within project area	yes⊙/ no○	yes○/ no○
within 1/2 mi radius	yes⊙/ no○	yes○/ no○

+ In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User under an active CHRIS Access and Use Agreement.

* These documents may be supplied as PDF files, if available

** Includes, but is not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys.

CHRIS Data Request Form

2b. Listed below are sources of additional information that may be available at the Information Center. Indicate if a review and documentation of any of the following types of information is requested.

Caltrans Bridge Survey	yes ○ / no ○
Ethnographic Information	yes ○ / no ○
Historical Literature	yes ○ / no ○
Historical Maps	yes ○ / no ○
Local Inventories	yes ○ / no ○
GLO and/or Rancho Plat Maps	yes ○ / no ○
Shipwreck Inventory	yes ○ / no ○
Soil Survey Maps	yes ○ / no ○

wood.

FIGURE 1

Project Vicintiy
Orange Memorial Park
South San Francisco, CA

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

11/2/2018 NWIC File No.: 18-0862

Ken Victorino
Wood Environment & Infrastructure Solutions
104 W. Anapamu Street, Suite 204A
Santa Barbara, CA 93101

re: Orange Memorial Park (5025183001)

The Northwest Information Center received your record search request for the project area referenced above, located on the San Francisco South USGS 7.5' quad. The following reflects the results of the records search for the project area and a 0.5 mile radius:

Archaeological resources within project area:	None
Archaeological resources within 0.5 mile radius:	P-41-000048, 000409, & 000495.
Reports within project area:	S-3043 & 13543.
Reports within 0.5 mile radius:	See enclosed database printouts.

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Historic Properties Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☒ enclosed	☐ not requested	☐ nothing listed
CA Inventory of Historic Resources (1976):	☒ enclosed	☐ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed

Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Soil Survey: http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA

Shipwreck Inventory: http://www.slc.ca.gov/Info/Shipwrecks.html

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

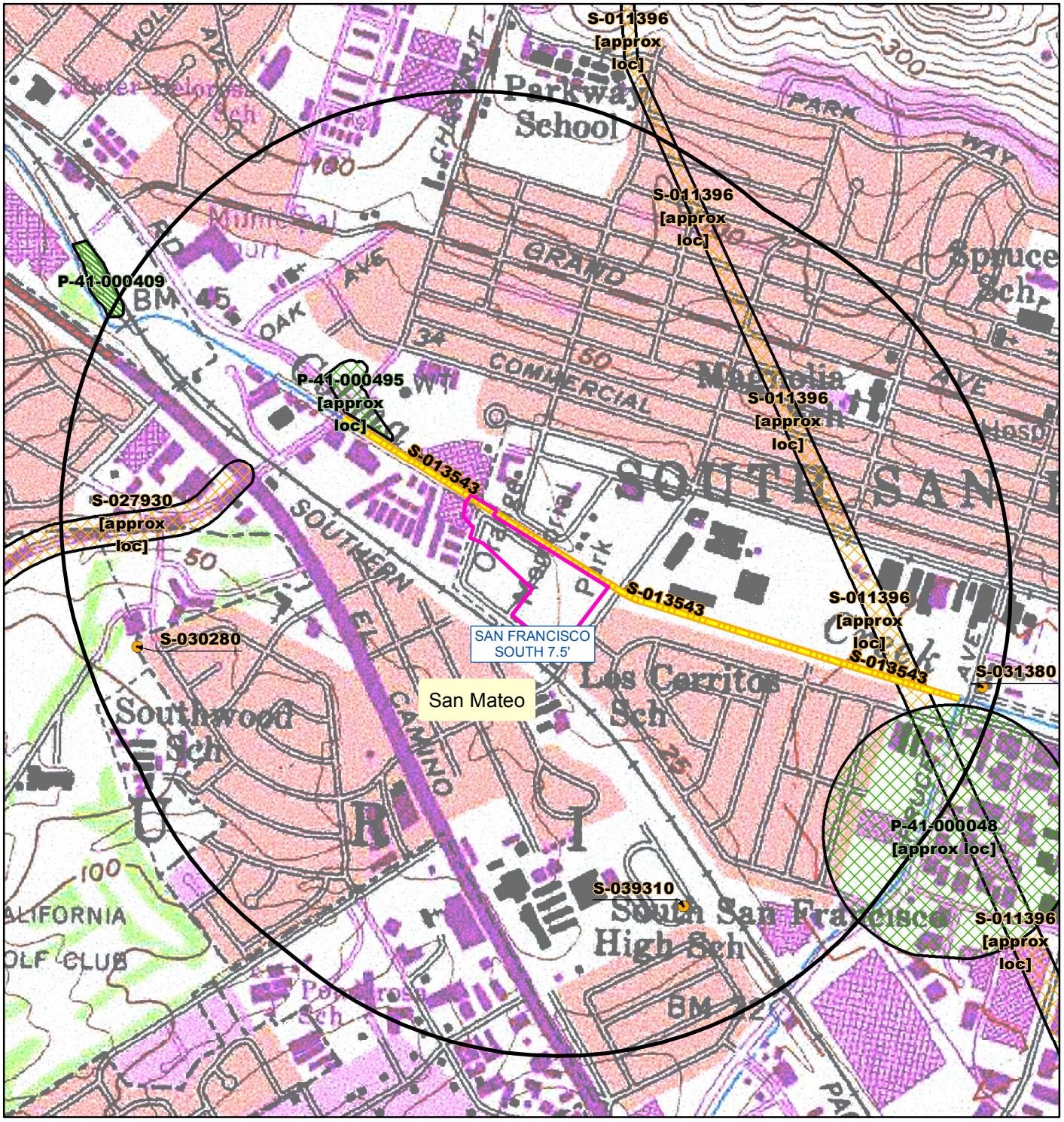
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

Orange Memorial Park (5025183001.01)
Map #1

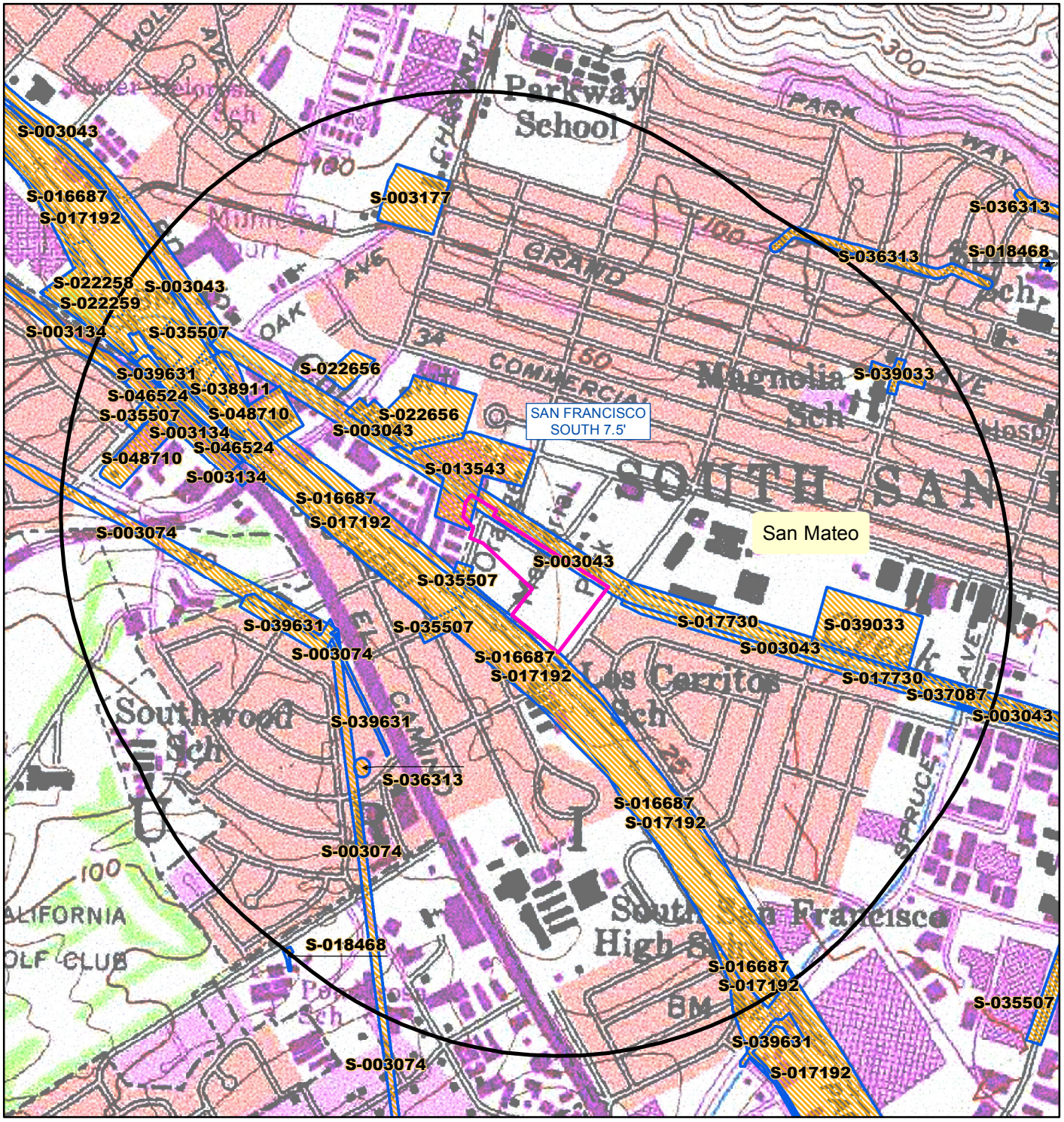


Northwest Information Center
File #18-0862, 2 November 2018, L. Hagel
May depict confidential cultural resource locations.
Do not distribute.

Feet: 0, 330, 660, 990, 1,320
Meters: 0, 60, 120, 180, 240, 300

N

Orange Memorial Park (5025183001.01)
Map #2



Northwest Information Center
File #18-0862, 2 November 2018, L. Hagel
May depict confidential cultural resource locations.
Do not distribute.

Feet: 0, 330, 660, 990, 1,320
Meters: 0, 60, 120, 180, 240, 300

N

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-41-000048	CA-SMA-000044	Resource Name - Nelson 383	Site	Prehistoric	AP01	([none], [none])	
P-41-000409	CA-SMA-000299	Resource Name - Colma Creek	Site	Prehistoric	AP15; AP16	1989 (Barb Bocek, Stanford University); 1994 (Carolyn Rice, [none])	S-016687, S-016688, S-022258, S-022259, S-027930, S-039770
P-41-000495	CA-SMA-000355	Resource Name - Colma Creek/Chestnut; Other - SSF Redevelopment Project 2000 Project Areas	Site	Prehistoric	AP11; AP15	2000 (Matthew R. Clark, Holman & Associates)	S-022656, S-022972, S-023271, S-027930, S-033611

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-003043	Voided - E-41 SMA	1977	David Chavez	Cultural Resources Evaluation of the Colma Wastewater Collection System, Town of Colma, San Mateo County, California		
S-003074	Voided - E-73 SMA	1979	Suzanne Baker	Archaeological Reconnaissance of the Proposed San Andreas Pipeline No. 3, San Mateo County	Archaeological Consultants	41-000103, 41-000104, 41-000123
S-003134	Voided - E-139 SMA	1976	Daniel L. Young	Archaeological Survey Report for Widening Project on 4-SM-82-20.8/22.1	California Department of Transportation	
S-003177	Voided - E-3 SMA	1976	William Roop	Archaeological Impact Evaluation of proposed Public Safety Facility (letter report)	Archaeological Resource Service	
S-011396		1989		Technical Report of Cultural Resources Studies for the Proposed WTG-WEST, Inc., Los Angeles to San Francisco and Sacramento, California: Fiber Optic Cable Project	BioSystems Analysis, Inc.	27-000819, 27-001444, 27-001445, 27-001446, 27-003235, 27-003236, 35-000036, 35-000053, 35-000151, 35-000152, 35-000153, 35-000154, 35-000167, 35-000168, 41-000009, 41-000105, 41-000169, 41-000172, 41-000230, 41-000231, 41-000410, 43-000024, 43-000028, 43-000042, 43-000050, 43-000178, 43-000179, 43-000180, 43-000181, 43-000182, 43-000183, 43-000184, 43-000189, 43-000245, 43-000247, 43-000248, 43-000388, 43-000449, 43-000456, 43-000595, 43-000619, 43-001001, 43-001010, 43-001059
S-013543	Submitter - MRC-2-02-92	1992	Matthew R. Clark	Initial Archaeological Evaluation of Proposed Park Additions and a Portion of the Colma Creek Channel for the Orange Memorial Park Master Plan EIR, South San Francisco	MRC Consulting	
S-016687	Voided - S-016688	1994	Carolyn Rice	BART-San Francisco Airport Extension Project, Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, Archaeological Survey Report		41-000409
S-016687a		1994	Carolyn Rice	BART-San Francisco Airport Extension Project, Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, Archaeological Resources Technical Report		

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-017192	OHP PRN - UMTA900828A	1994	Laurence H. Shoup, Mark Brack, Nancy Fee, and Bruno Giberti	BART-San Francisco Airport Extension Project, Draft Environmental Impact Report/Supplemental Environmental Impact Statement, Historic Architectural Survey Technical Report	Archaeological/Historical Consultants	41-000323, 41-000324, 41-000325, 41-000326, 41-000327, 41-000328, 41-000329, 41-000330, 41-000331, 41-000332, 41-000333, 41-000334, 41-000335, 41-000336, 41-000337, 41-000338, 41-000339, 41-000340, 41-000341, 41-000342, 41-000343, 41-000344, 41-000345, 41-000346, 41-000347, 41-000348, 41-000349, 41-000350, 41-000351, 41-000352, 41-000353, 41-000354, 41-000355, 41-000356, 41-000357, 41-000358, 41-000359, 41-000360, 41-000361, 41-000362, 41-000363, 41-000364, 41-000365, 41-000366, 41-000367, 41-000368, 41-000369, 41-000370, 41-000371, 41-000372, 41-000373, 41-000374, 41-000375, 41-000376, 41-000377, 41-000378, 41-000379, 41-000380, 41-000381, 41-000382, 41-000383, 41-000384, 41-000385, 41-000386, 41-000387, 41-000388, 41-000389, 41-000390, 41-000391, 41-000392, 41-000393, 41-000394, 41-000395, 41-000396, 41-000397, 41-000398, 41-000543, 41-000640, 41-001557, 41-001558, 41-001559, 41-001560, 41-001561, 41-001562, 41-001563, 41-001564, 41-001565, 41-001566, 41-001567, 41-001568, 41-001569, 41-001570, 41-001571, 41-001572, 41-001573, 41-001574, 41-001576, 41-001577, 41-001578, 41-001579, 41-001580, 41-001581, 41-001582, 41-001583, 41-001584, 41-001585, 41-001586, 41-001587, 41-001588, 41-001591, 41-001592, 41-001593, 41-001594, 41-001595, 41-001596, 41-001597, 41-001598, 41-001599, 41-001600, 41-001601, 41-001602, 41-001603, 41-001604, 41-001605, 41-001606, 41-001607, 41-001608, 41-001609, 41-001610, 41-001611, 41-001612, 41-001613, 41-001614, 41-001615, 41-001616, 41-001617, 41-001618, 41-001619,

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
						41-001620, 41-001621, 41-001622, 41-001623, 41-001624, 41-001625, 41-001626, 41-001627, 41-001628, 41-001629, 41-001630, 41-001631, 41-001632, 41-001633, 41-001634, 41-001635, 41-001636, 41-001637, 41-001638, 41-001639, 41-001640, 41-001641, 41-001642, 41-001643, 41-001644, 41-001645, 41-001646, 41-001647, 41-001648, 41-001649, 41-001650, 41-001651, 41-001652, 41-001653, 41-001654, 41-001655, 41-001656, 41-001657, 41-001658, 41-001659, 41-001660, 41-001661, 41-001662, 41-001801, 41-002430, 41-002431
S-017192a		1995	Laurence H. Shoup and Ward Hill	Bart-SFP Extension Project, Draft Environmental Impact Report/Supplemental Environmental Impact Statement, Historic Architectural Survey Technical Report, Volume II: Alternative VI, Highway 380 to Trousdale Drive in Burlingame	Archaeological/Historical Consultants	
S-017192b		1995	Cherilyn Widdell	UMTA900828A; Project: BART Extension from Colma to San Francisco International Airport	Office of Historic Preservation	
S-017730		1995	Carolyn Rice	Colma Creek Zone Drainage Improvements Project, Cultural Resources Technical Report		
S-018468		1996	Mark Hylkema	Historic Properties Survey Report (HPSR) and Negative Archaeological Survey Report for the Proposed Installation of Modular Classrooms at Spruce, Martin, Ponderosa, and Skyline Schools, South San Francisco Unified School District		41-000406, 41-000407, 41-000408
S-018468a		1996	Mark Hylkema	Negative Archaeological Survey Report for the Proposed Installation of Modular Classrooms at Spruce, Martin and Ponderosa Schools in the City of South San Francisco, San Mateo County		
S-022258		1999	Suzanne Baker	BART Construction Archaeological Monitoring, Prehistoric Site CA-SMA-299 (letter report)	Archaeological/Historical Consultants	41-000409

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-022259		1999	Suzanne Baker	BART Construction Archaeological Monitoring, Prehistoric Site CA-SMA-299 (letter report)	Archaeological/Historical Consultants	41-000409
S-022656	Voided - S-22972; Voided - S-23271	2000	Matthew R. Clark	Initial Subsurface Archaeological Reconnaissance of Two Redevelopment Parcels on Chestnut Avenue in the City of South San Francisco, California, with Preliminary Resource Evaluation and Management Recommendations	Holman & Associates	41-000495
S-022656a		2000	Matthew R. Clark	An Addendum To: Initial Subsurface Archaeological Reconnaissance of Two Redevelopment Parcels on Chestnut Avenue in the City of South San Francisco, California	Holman & Associates	
S-022656b		2000	Matthew R. Clark	Final Report: Subsurface Archaeological Reconnaissance, Assessment of Potential Project Impacts, and Resource Management Recommendations for the Chestnut Creek Senior Housing Project, South San Francisco	Holman & Associates	
S-027930		2003	Kyle Brown, Adam Marlow, James Allan, and William Self	Cultural Resource Assessment of Alternative Routes for PG&E's Jefferson-Martin Transmission Line, San Mateo County, California	William Self Associates, Inc.	41-000044, 41-000077, 41-000079, 41-000093, 41-000094, 41-000095, 41-000103, 41-000104, 41-000149, 41-000172, 41-000207, 41-000283, 41-000302, 41-000401, 41-000402, 41-000404, 41-000409, 41-000410, 41-000487, 41-000495, 41-000497, 41-001376, 41-002115, 41-002116, 41-002163
S-030280		2004		Cultural Resources Study of the El Camino, Westborough Project AT&T Wireless Services Site No. 960006094C, 840 West Orange Avenue, South San Francisco, San Mateo County, Calfiornia 94080.	Historic Resource Associates	
S-031380	Submitter - Project Number: SF-05160C	2006	Lorna Billat and Christeen Taniguchi	New Tower ("NT") Submission Packet, FCC Form 620, SSF Fire Station, SF-05160C	Earth Touch, Inc.	
S-035507	OHP PRN - EPA 020813A	2008	Matthew R. Clark	City of South San Francisco Wet Weather Program Project, Section 106 Compliance for the South San Francisco Wet Weather Program: Phase II Archaeological Monitoring Report	Holman & Associates	41-002207

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-035507a		2003	Matthew R. Clark and Kathryn Entricken	City of San Francisco Wet Weather Program Project, Section 106 Compliance for Phase 3: The Colma Creek Bank Protection Project Archaeological Monitoring Report	Holman & Associates	
S-035507b		2007	Matthew R. Clark	City of San Francisco Wet Weather Program, Historic Properties Inventory Research and Subsurface Reconnaissance for Proposed Phase 2 Facilities (EPA 020713 A)	Holman & Associates	
S-036313		2009		Crystal Springs Pipeline No. 2 Replacement Project, San Francisco and San Mateo Counties, California: Historic Context and Archaeological Survey Report	ESA+Orion	41-000012, 41-000081, 41-000302, 41-000313, 41-000314
S-036313a		2009	Rancy S. Wiberg	Technical Report, Extended Archaeological Survey, Crystal Springs Pipeline No. 2, Segments 2 and 3 Between Sites 8 and 9, City of San Mateo and Town of Hillsborough	Holman & Associates	
S-037087		2010	James Allan	Cultural Resources Assessment of the Colma Creek Flood Control Channel Wall Repair Project, South San Francisco, San Mateo County, California (letter report)	William Self Associates, Inc.	
S-038911		2011	Randy Wiberg	Cultural Resources Surveys for the Crystal Springs Pipeline No. 2 Replacement Project (Construction Deviations Supplement) (letter report)	Holman & Associates	
S-039033	Other - Federal Aid Project No. 5177 (028)	2012	Sunshine Psota	Historic Property Survey Report, Federal Aid Proj. No. 5177 (028), Grand Avenue/Magnolia Avenue Traffic Signal in South San Francisco	Holman & Associates	
S-039033a		2012	Sunshine Psota	ASR Short Form for Local Assistance Projects, Federal-Aid Proj. No. HSIP - 5177 (028), Grand Avenue/Magnolia Avenue Traffic Signal in South San Francisco	Holman & Associates	
S-039310		2012	Lorna Billat	Collocation ("CO") Submission Packet, FCC Form 621, South San Francisco High School, Project Number: SF-19410A	EarthTouch, Inc.	
S-039631	Voided - S-39632	2011	Allen G. Pastron and Michelle Touton	Historic Context and Archaeological Survey Report for the Regional Groundwater Storage and Recovery Project Area, San Mateo County, California	Archeo-Tec	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-039631a		2012	Allen G. Pastron and Michelle Touton	Addendum to Historic Context and Archaeological Survey Report for the Regional Groundwater Storage and Recovery Project Area, San Mateo County, California	Archeo-Tec	
S-046524	Agency Nbr - CML - 5177 (033); Voided - S-46783	2015	Sunshine Psota	Historic Property Survey Report, CML - 5177 (033), sidewalk improvements along El Camino Real in South San Francisco, San Mateo County, California	Holman & Associates	
S-048710		2017	Nichole Jordan Davis and Margo Nayyar	Confidential Cultural Resources Letter Report for the Community Civic Campus Project, City of South San Francisco, San Mateo County, California (letter report)	Michael Baker International	41-002480, 41-002481

APPENDIX B

Native American Consultation

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Orange Memorial Park

County: San Mateo

USGS Quadrangle

Name: San Francisco South

Township: _____ Range: _____ Section(s): _____

Company/Firm/Agency:

Wood Environment & Infrastructure Solutions

Contact Person: Ken Victorino

Street Address: 104 W. Anapamu Street, Suite 204A

City: Santa Barbara Zip: 93101

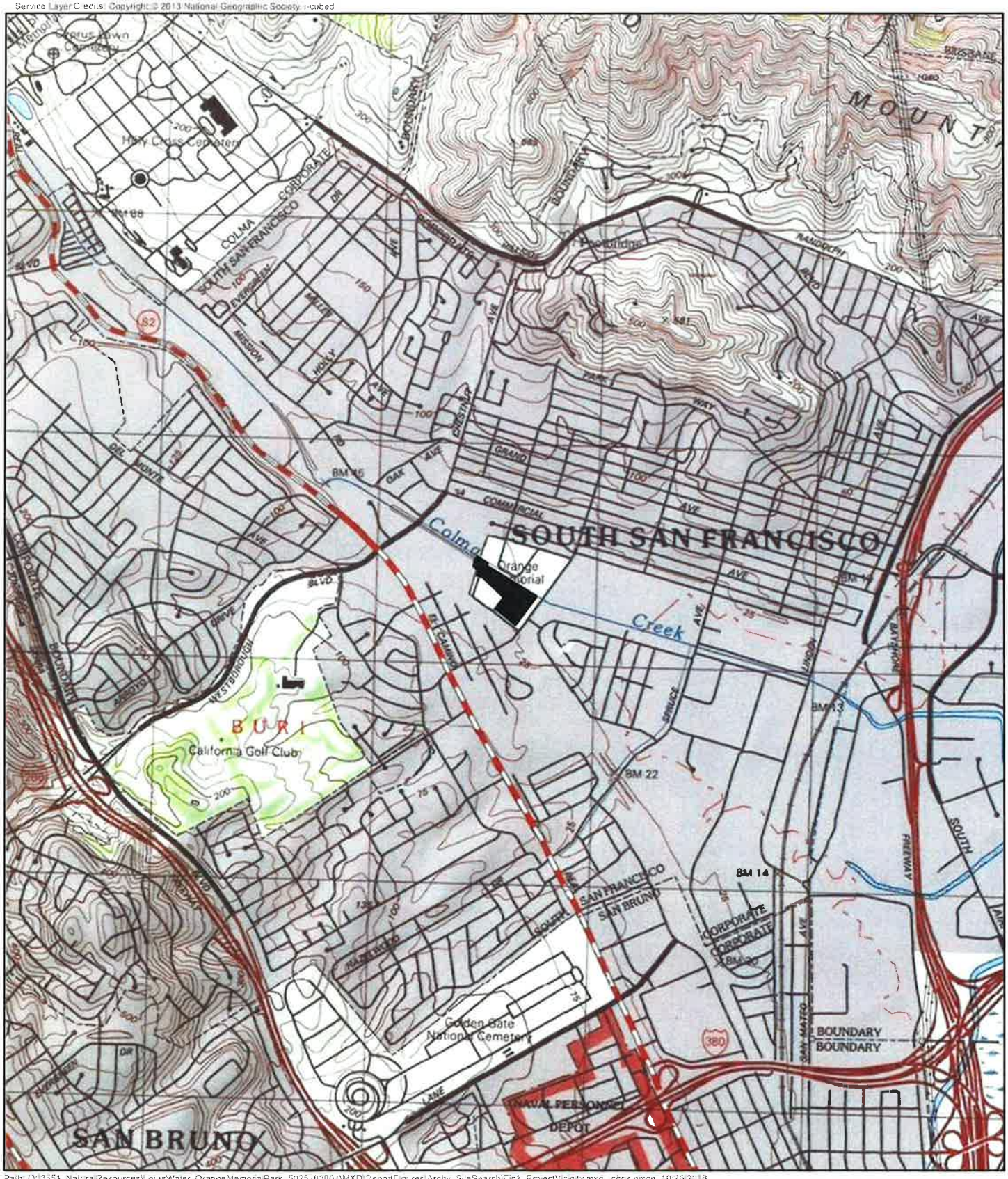
Phone: (805) 962-0992 Extension: 228

Fax: (806) 966-1706

Email: ken.victorino@woodplc.com

Project Description:

☑ Project Location Map is attached



wood.

FIGURE 1

Project Vicintiy
Orange Memorial Park
South San Francisco, CA

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

November 5, 2018

Ken Victorino
Wood Environmental & Infrastructure Solutions

Sent by E-mail: ken.victorino@woodplc.com

RE: Proposed Orange Memorial Park Project, City of South San Francisco; San Francisco South USGS Quadrangle, San Mateo County, California

Dear Mr. Victorino:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., Ph.D.
Associate Governmental Program Analyst
(916) 373-3714

Native American Heritage Commission
Native American Contact List
San Mateo County
11/5/2018

Amah MutsunTribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org

Costanoan
Northern Valley
Yokut

Amah MutsunTribal Band
Edward Ketchum,
35867 Yosemite Ave
Davis, CA, 95616
aerieways@aol.com

Costanoan
Northern Valley
Yokut

Amah MutsunTribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA, 94062
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com

Costanoan

Costanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street
Pomona, CA, 91766
Phone: (909) 629 - 6081
Fax: (909) 524-8041
rumsen@aol.com

Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyon.org

Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 232
Castro Valley, CA, 94546
Phone: (408) 464 - 2892
cnijmeh@muwekma.org

Costanoan

The Ohlone Indian Tribe
Andrew Galvan,
P.O. Box 3152
Fremont, CA, 94539
Phone: (510) 882 - 0527
Fax: (510) 687-9393
chochenyo@AOL.com

Bay Miwok
Costanoan
Patwin
Plains Miwok

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Orange Memorial Park Project, San Mateo County.

APPENDIX C

Geoprobe Forms

wood.

GEOPROBE FORM

Project: OMD

Site No. — **Geoprobe #:** 1 **Date:** 3/12/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material):

100cm, 247cm, 400cm

0 - 47 sandy s/l 10YR 4/2 dk grayish brown
disturbed

47 - 88 med. sand 10YR 5/2 brown
intact

88 - 100 fine sand 10YR 5/3 brown
intact

100 - 165 med. sand 10YR 4/2 dk grayish brown
intact

165 - 172 fine sandy clay 10YR 4/3 brown

172 - 177 clay 10YR 3/2 very dk grayish brown

177 - 183 fine sand 10YR 4/3 brown

183 - 186 sandy clay 10YR 3/1 very dk gray/
186 - 247 fine sand 10YR 4/2 dk grayish brown

246 - 316 fine clayey sand 10YR 5/6
yellowish brown

316 - 320 sandy clay 10YR 4/2 dk grayish brown

320 - 335 fine sand 10YR 5/6 yellowish brown

335 - 338 clay 10YR 3/2 very dk grayish brown

338 - 345 fine sand 10 YR 4/3 brown

345 - 348 clay 10YR 3/2 very dk grayish brown

348 - 370 sand, med 10 YR 5/2 grayish brown

INTACT

Termination Depth: 400cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts):

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

370 - 373cm clayey sand
10YR 5/2 grayish brown

373 - 400cm sand
10YR 5/2 grayish brown

appears to be naturally deposited sand & clay from channel/creek
→ no loamy soils present
→ no materials observed
→ no soils screened

wood.

GEOPROBE FORM

Project: OMD

Site No. — **Geoprobe #:** 2 **Date:** 5/12/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 100cm, 251cm, 400cm

0-54 fill/silty sandy with asphalt
54-185 fill? intact? fine silty sand
10YR 4/2 dk grayish brown
185-188 fine silty sand 10YR5/3 brown
188-190 silty clay 10YR 4/2 dk grayish brown
190-200 fine silty loam 10YR5/2 grayish brown
200-202 silty clay 10YR 4/2 dk grayish brown
202-206 fine silty sand 10YR 5/2 grayish brown
206-210 silty clay 10YR4/2 dk grayish brown
210-296 med. sand 10YR 5/3 brown
296-298 silty clay 10YR 3/1 very dk gray
298-306 fine sand 10YR5/2 grayish brown
306-309 sandy clay 10YR 3/1 very dk gray
309-327 fine sandy silt 10YR5/2 grayish brown
327-330 clay 10YR 3/1 very dk gray
330-348 med sand 10YR 6/2 dk grayish brown
348-351 clay 10YR 3/1 very dk gray
351-364 med sand 10YR 4/3 brown
364-366 silty clay 10YR 4/2 dk grayish brown
366-371 med sand 10YR 4/3 brown
371-373 sandy clay 10YR 4/2 dk grayish brown
373-378 med sand 10YR 4/3 brown
378-382 silty clay 10YR 4/2 dk grayish brown

INTACT

Termination Depth: 400cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): _____

Crew Chief: KDV **Screener:** _____ **Excavator:** Cascade

382 - 400 med. sand
10YR 4/3 brown

transition @ 185cm is abrupt w/ obvious color change - could possibly indicate fine silty sand from 54 - 185cm is fill
below 185cm is intact
intact soils are clays & sands that are naturally deposited from channel/creek

→ no materials observed
→ no dark loamy soil
→ no soil screened

wood.

GEOPROBE FORM

Project: OMD

Site No. — **Geoprobe #:** 3 **Date:** 3/12/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 100cm, 248cm, 397cm

0 - 85 fill including asphalt

85 - 93 silty sand 10YR 4/3 brown

93 - 100 silty clay 10YR 3/2 very dk grayish brn

100 - 174 sandy silt 10YR 3/2 very dk grayish brn

174 - 202 med sand 10YR 4/3 brn

202 - 236 sandy silt 10YR 3/2 very dk grayish brn

236 - 245 sandy silt 10YR 5/2 grayish brn

245 - 248 silty clay 10YR 5/2 grayish brn

248 - 348 med. sand 10YR 4/3 brn

348 - 352 clay 10YR 3/1 very dk gray

352 - 362 sand 10YR 5/3 brn

362 - 370 silty clay 10YR 3/1 very dk gray

370 - 382 silty sand 10YR 4/3 brown

382 - 397 med. sand 10YR 4/3 brown

FILL?

INTACT

85 - 236 may be fill (soil layers uniform) mixed interface @ 236

236 - 397 intact (based on depositional "layers")

→ no material observed

→ no dk loamy soil

→ no soil screened

Termination Depth: 397cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts):

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. _____ **Geoprobe #:** 4 **Date:** 3/12/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 95, 244, 398

0 - 68 fill - lower layer is crushed asphalt

FILL? 68 - 185 med. sand 10YR 4/3 brown

FILL? 185 - 230 clayey sand 10YR 4/2 dk grayish brown

230 - 244 silty clayey 10YR 3/2 very dk grayish brn

244 - 308 med. sand 10YR 5/3 brn

308 - 310 sandy clay 10YR 4/2 dk grayish brn

310 - 332 med. sand 10YR 5/2 grayish brn

332 - 343 silty sand 10YR 4/3 brn

343 - 347 sandy clay 10YR 4/2 dk grayish brn

INTACT 347 - 355 silty sand 10YR 5/2 grayish brn

355 - 360 silty clay 10YR 3/1 very dk gray

360 - 373 silty sand 10YR 4/3 brn

373 - 378 silty sand 10YR 5/2 grayish brn

68-185 med. sand is uniform, fill?

interface @ 230 is mottled, fill?

230 - 378 intact

→ no dk loamy soil

→ no materials observed

→ no soil screened

Termination Depth: 378cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): _____

Crew Chief: KDY **Screener:** _____ **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. ———— **Geoprobe #:** 5 **Date:** 3/12/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 92, 252, 397

0 – 179 fill, sand then clay
fill? 179 – 211 silty sand 10YR 4/2 dk grayish brn
211 – 226 med. sand 10YR 4/3 brn
226 – 233 clay 10YR 3/1 very dk gray
233 – 315 med. sand 10YR 4/3 brn
315 – 321 clay 10YR 3/1 very dk gray
321 – 336 fine sand 10YR 4/3 brn
336 – 338 fine sandy clay 10YR 3/2 very dk grayish brn
338 – 342 silty sand 10YR 4/2 dk grayish brn
342 – 346 silty clay 10YR 3/2 very dk grayish brn
346 – 351 silty sand 10YR 4/2 dk grayish brn
351 – 357 silty clay 10YR 3/2 very dk grayish brn
357 – 367 silty sand 10YR 4/2 dk grayish brn
367 – 371 loamy clay 10YR 3/2 very dk grayish brn
371 – 378 silty sand 10YR 3/2 very dk grayish brn
378 – 380 loamy clay 10YR 3/2 very dk grayish brn
380 – 397 med. sand 10YR 4/2 dk grayish brn

INTACT

@ 179 there is orange clay not previously seen
179 – 211 fill? portion mottled, portion uniform
below 211 appears to be naturally deposited clay & sand
→ no dark loamy soil → no materials observed
→ no soil screened

Termination Depth: 397cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): [circled: below project impacts]

Crew Chief: KDV **Screener:** ——— **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 6 **Date:** 3/13/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 123, 237, 315

0 – 94 fill including small rocks (up to 1inch)
94 – 107 med sand 10YR 4/2 dark grayish brn
107 – 176 silty sand 10YR 3/2 very dark grayish brn
176 – 180 silty clay 10YR 2/1 very dark gray
180 – 194 silty sand 10YR 3/2 very dark grayish brn
194 – 208 clayey sand 10YR 3/2 very dark grayish brn
208 – 230 fine sand 10YR 3/2 very dark grayish brn
230 – 237 clayey 10YR 3/1 very dark gray
237 – 247 med sand 10YR 4/3 brn
247 – 271 sandy silt 10YR 4/3 brn
271 – 278 med. sand 10YR 4/4 dark yellowish brn
278 – 281 silty sand 10YR 3/2 very dark grayish brn
281 – 294 med. sand 10YR 4/3 brn
294 – 300 silty clay 10YR 3/1 very dark gray
300 – 315 med sand 10YR 4/4 dark yellowish brn

INTACT

appears to be alternating layers of clay & sand naturally deposited along creek
→ no materials observed
→ no dark loam soil associated w/ prehistoric occupation
→ no soils screened

Termination Depth: 315cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): _____

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMD

Site No. — **Geoprobe #:** 7 **Date:** 3/13/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 130, 210, 325

0-114 fill → bottom soil is color & texture not previously observed

FILL? 114-121 silty clay 10YR 3/1 very dk clay

121-130 med. sand 10YR 4/3 brn

130-139 med. sand 10YR 5/3 brn

139-144 sandy silt 10YR 4/2 dk grayish brn

144-191 med. sand 10YR 4/2 dk grayish brn

191-194 clayey sand 10YR 3/1 very dk gray

194-248 med. sand 10YR 4/2 dk grayish brn

248-255 clay 10YR 3/1 very dk gray submersed?

255-272 med. sand 10YR 3/3 dk brn

272-275 alternating "micro layers" of sand & clay

INTACT 275-294 med. sand 10YR 3/3 dk brn

294-295 coarse sand

295-296 med. sand

296-297 coarse sand

297-307 silty sand 10YR 4/2 dk grayish brn

307-311 silty clay 10YR 3/1 very dk gray

311-325 med. sand 10YR 3/2 very dk grayish brn

- below 121 are naturally deposited layers of clay & sand

→ no material → no dark loam → no screenings

Termination Depth: 325cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): —

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: CMP

Site No. — **Geoprobe #:** 8 **Date:** 3/13/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 130, 220, 305

0 - 91 Fill

91 - 98 silty sand 10YR 4/3 brn

98 - 100 clay 10YR 3/1 very dk gray

100 - 108 "micro layers" of sand & clay

108 - 110 clay 10YR 3/1 very dk gray

110 - 130 med. sand 10YR 5/3 brn

130 - 134 silty sand 10YR 4/2 dk grayish brn

134 - 138 silty clay 10YR 3/1 very dk gray

138 - 139 silty sand 10YR 3/6 dk yellowish brn

139 - 169 silty sand 10YR 4/2 dk grayish brn

169 - 171 sandy loam 10YR 3/2 very dk grayish brn

171 - 198 "micro layers" sand & clay

198 - 206 sandy loam 10YR 3/1 very dk gray

206 - 245 "micro layers" of sand & clay

245 - 248 clayey sand 10YR 2/2 very dk brn

248 - 266 med. sand 10YR 4/3 brn

266 - 268 clayey sand 10YR 3/1 very dk gray

268 - 305 "micro layers" of sand & clay

INTACT

below 91 appears to be naturally deposited

→ no materials observed

→ no dark loam soil associated w/ occupation

→ no soil screened

Termination Depth: 305cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): —

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 9 **Date:** 3/13/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 135, 245, 340

0 – 96 Fill (bottom layer is gray clay not previously seen)

96 – 107 silty sand 10YR 4/2 dark grayish brown

107 – 111 silty loam 10YR 3/2 very dark grayish brown

111 – 115 silty sand 10YR 4/2 dark grayish brown

115 – 120 silty clay 10YR 3/1 very dark gray

120 – 216 med. sand 10YR 4/4 dark yellowish brown

216 – 230 coarse sand 10YR 5/3 brown

230 – 257 med sand 10YR 3/3 dark brown

257 – 259 sandy silt 10YR 3/1 very dark gray

259 – 261 coarse sand 10YR 3/2 very dark grayish brown

261 – 282 med. sand 10YR 3/2 very dark grayish brown

282 – 284 silty clay 10YR 3/1 very dark gray

284 – 311 med. sand. 10YR 4/3 brown

311 – 312 silty sand 10YR 4/2 dark grayish brown

312 – 340 med. sand 10YR – 4/3 brown.

INTACT

naturally deposited layers of clay & sand associated w/ creek

→ no dark loamy soil

→ no materials observed

→ no soils screened

Termination Depth: 340 cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): _____

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 10 **Date:** 3/14/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 120, 245, 370

0 – 151 fill incl. crushed asphalt & concrete

151 – 178 fine sand 10YR 4/2 dark grayish brn

178 – 182 fine sandy clay 10YR 3/1 very dark gray

182 – 232 med sand 10YR 4/2 dark grayish brn

232 – 234 clay 10YR 3/1 very dark gray

234 – 326 med sand 10YR 5/3 dark brn

326 – 327 silty clay 10YR 3/1 very dark gray

326 – 334 silty sand 10YR 3/2 very dark grayish brn

334 – 335 sandy clay 10YR 3/1 very dark gray

335 – 345 silty sand 10YR 3/2 very dark grayish brn

345 – 346 clay 10YR 3/1 very dark gray

346 – 359 silty sand 10YR 3/2 very dark grayish brown

359 – 370 med. sand 5Y 4/1 dark gray. submerged? slough?

INTACT

below 151 appears to be alternating layers of naturally deposited sand & clay associated w/ creek

→ no artifacts observed

→ no dark loamy soil

→ no soils scraped off

Termination Depth: 370cmy **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): _____

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 11 **Date:** 3/14/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 120, 250, 375

0 – 102 fill w/ compacted gravels
102 – 120 "mixed layers" of sand & clay
120 – 240 med. sand 10YR 5/3 brn
240 – 242 clay 10YR 3/1 very dk gray
242 – 321 med. sand 10YR 4/2 dk grayish brn
321 – 324 coarse sand
324 – 326 "mixed layers"
326 – 335 med. sand 10YR 5/3 dk brn
335 – 336 clay 10YR 3/1 very dk gray
336 – 345 fine sand 10YR 4/2 dk grayish brn
345 – 347 silty clay 10YR 4/1 dk gray
347 – 354 silty sand 10YR 3/2 very dk grayish brn
354 – 355 silty clay 10YR 3/1 very dk gray
355 – 363 fine silty sand 10YR 4/2 dk grayish brn
363 – 375 silt 5YR 4/1 dk gray submerged sloosh?

→ naturally deposited soil layers below 102
→ site at bottom may have been submerged at some point, similar to slosh

→ no artifacts observed
→ no soil screened

Termination Depth: 375cm **Cultural Material Present (Y or N):** —

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): —

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 12 **Date:** 3/14/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 125, 245, 370

0 – 83 fill, bottom layer is gray soil not previously seen
83 – 96 med sand 10YR 5/2 grayish brn
96 – 97 coarse sand
97 – 105 fine sand 10YR 4/2 dk grayish brn
105 – 106 clay 10YR 3/1 very dk gray
106 – 116 fine sand 10YR 3/2 very dk grayish brn
116 – 117 clay 10YR 3/1 very dk gray
117 – 160 med. sand 10YR 4/3 brn
160 – 163 fine sandy clay 10YR 4/2 dk grayish brn
163 – 188 fine sand 10YR 4/2 dk grayish brn
188 – 191 fine clayey sand 10YR 3/2 very dk grayish brn
191 – 210 fine sand 10YR 3/2 very dk grayish brn
210 – 216 silty sand 10YR 4/3 brn
216 – 300 med sand 10YR 4/2 dk grayish brn
300 – 305 clay w/organics 10YR 3/1 very dk gray
305 – 314 med sand 10YR 4/2 dk grayish brn
314 – 320 silty clay 10YR 4/1 dk gray
320 – 350 med sand 10YR 4/2 dk grayish brn
350 – 352 fine sand 10YR 3/2 very dk grayish brn
352 – 357 fine sand 5Y 3/1 very dk gray
357 – 359 fine sandy clay 5Y 3/1 very dk gray
359 – 361 fine sand 5Y 3/1 very dk gray

INTACT

submerged?

Termination Depth: 370cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): [below project circled]

Crew Chief: KDW **Screener:** — **Excavator:** Cascade

361–362 fine sandy clay
5Y 3/1 very dark gray

362 – 370 med sand
5Y 3/1 very dark gray

- intact, naturally-deposited layers from 83 to 370
- below 352 may have been submerged at some point, switch to slags

→ no materials observed
→ no dark, developed soil
→ no screenings

wood.

GEOPROBE FORM

Project: OMP

Site No. —— **Geoprobe #:** 13 **Date:** 3/11/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 125, 250, 375

0 – 90 fill
90 – 110 fine sand 10YR 4/2 dk grayish brn
110 – 113 fine sandy clay 10YR 3/1 very dk gray
113 – 152 fine sand 10YR 4/2 dk grayish brn
152 – 157 "micro layers" of clay & fine sand
157 – 160 fine sand 10YR 4/2 dk grayish brn
160 – 180 fine sand 10YR 3/2 very dk grayish brn
180 – 193 "micro layers" of clay & fine sand
193 – 195 silty loamy 10YR 4/2 dk grayish brn
195 – 201 med sand 10YR 4/3 brn
201 – 202 fine silty clay 10YR 3/2 very dk grayish brn
202 – 204 silty sand 10YR 5/2 grayish brn
204 – 205 fine sandy clay 10YR 3/2 very dk grayish brn
205 – 225 med sand 10YR 5/3 brn
225 – 239 med sand 10YR 4/2 dk grayish brn
239 – 243 clay 10YR 3/1 very dk gray
243 – 282 fine sand 10YR 5/3 brn
282 – 293 clayey sand 10YR 4/2 dk grayish brn
293 – 300 med sand 10YR 10YR 4/4 dk yellowish brn
300 – 303 coarse sand
303 – 313 med sand 10YR 4/3 brn
313 – 321 silty clay 10YR 3/2 very dk grayish brn
321 – 332 med sand 10YR 4/3 brn

INTACT

Termination Depth: 375 **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): ——

Crew Chief: KDV **Screener:** —— **Excavator:** Cascade

332–335	coarse sand
335–348	med. sand 10YR 5/3 brn
348–351	clay/cy silt 10YR 4/2 dk gray/ish brn
351–357	"micro layers" of sands & clay
357–360	coarse sand
360–375	med. sand 10YR 5/3 brn

below 90cm appears to be naturally-deposited soil layers associated w/ the creek

→ no materials observed

→ no dark, developed soil indicative of exposed surface w/ occupation

→ no soils screened

wood.

GEOPROBE FORM

Project: OMP

Site No. — **Geoprobe #:** 14 **Date:** 3/14/19

Brief Description of Each Level Description (for each soil change please note Munsell color, soil type, compaction, moisture, degree of disturbance, amount and type of cultural material): 125, 250, 370

0 – 53 fill

53 – 79 med. sand 10YR 4/2 dark grayish brn

79 – 81 sandy clay 10YR 2/2 very dark brn

81 – 111 med sand 10YR 4/3 brn

111 – 116 fine sand 10YR 4/2 dark grayish brn

116 – 148 med. sand 10YR 4/2 dark grayish brn

148 – 152 "micro layers" of sand & clay

152 – 223 "micro layers" of fine sand to coarse sand

223 – 232 med. sand 10YR 4/2 dark grayish brn

232 – 233 fine sandy clay 10YR 3/2 very dark grayish brn

233 – 271 med. sand 10YR 4/3 brn

271 – 274 fine sandy clay 10YR 4/2 dark grayish brn

274 – 288 silty sand 10YR 3/3 dark brn

288 – 295 clay 10YR 3/1 very dark gray

295 – 303 fine sand 10YR 4/2 dark grayish brn

303 – 304 clay 10YR 3/1 very dark gray

304 – 309 sandy silt 10YR 4/1 dark gray

309 – 320 fine sand 10YR 4/2 dark grayish brn

320 – 323 clayey silt 10YR 3/2 very dark grayish brn

323 – 327 med. sand 10YR 3/2 very dark grayish brn

327 – 332 clayey sand 10YR 3/1 very dark gray

332 – 340 med. sand 10YR 3/2 very dark grayish brn

INTACT

Termination Depth: 370cm **Cultural Material Present (Y or N):** N

Justification for Terminating Geoprobe (sterile level, bedrock, below project impacts): —

Crew Chief: KDV **Screener:** — **Excavator:** Cascade

340 – 355 med. sand
10YR 3/4 dk yellowish brn

355 – 358 clayey sand
10YR 3/1 very dark gray

358 – 370 sandy silt
10YR 2/2 very dk brn

- below 53 appears to be naturally-deposited, alternating layers of sand & clay or silt associated w/ creek

→ no materials observed
→ no dark, developed soil
→ no screenings