



CULTURAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT FOR THE BROWN STRAUSS INDUSTRIAL PROJECT, CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

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SUMMARY OF FINDINGS

This study was conducted to determine the potential impacts to cultural and paleontological resources during the Brown Strauss Industrial (Project) in the City of Banning (City), Riverside County, California. The City is the lead agency for the Project under the California Environmental Quality Act (CEQA).

The Project is located within Assessor Parcel Numbers (APNs) 540-180-020, -022 and -026 located at 1219 and 1431 West Lincoln Street in the City of Banning, Riverside County, California.

The Project involves the development of 14.92 gross acres of vacant land to construct a steel manufacturing and distribution facility. The total development proposal includes a 45,000 square foot warehouse, a 3,000 square foot office, two 500 square foot enclosed saw sheds, and an outdoor storage yard. The Project entitlements will require a General Plan amendment, zone change, and parcel merger. Maximum expected depth of ground disturbance is 18 to 20 feet.

Paleontological Resources

The Project is mapped entirely as late Pleistocene (129,000 to 11,700 years ago) alluvial fan deposits of San Gorgonio Pass.

The results of the record search showed that no fossils have previously been recorded from the proposed Project Area or from within a one-mile radius. However, abundant late Pleistocene fossils have been found in association with the Diamond Valley Lake and San Diego Pipeline 6 / Salt Creek Channel projects in southern Hemet, California, approximately 15 miles southwest of the current Project. Thousands of Pleistocene fossils have been recorded near the Project Area, including Pacific mastodon, Columbian mammoth, ground sloth, sabre-toothed cat, dire wolf, short-faced bear, bison, horse, stilt-legged llama, yesterday's camel, flat-headed peccary, diminutive pronghorn, and California turkey.

Based upon recorded fossil locality data in and near the Project Area, areas mapped as alluvial fan deposits of San Gorgonio Pass are assigned a moderate sensitivity (PFYC 3).

At present, based upon the potential for impacts to the late Pleistocene alluvial fan deposits of San Gorgonio Pass at depth within the Project Area, a Paleontological Resources Impact Mitigation Plan should be developed and implemented, which should include development of a paleontology Worker Environmental Awareness Program as well as paleontological monitoring.

In the event of an unanticipated paleontological discovery, all work must be suspended within 50 feet of the find until a qualified paleontologist evaluates it.

Cultural Resources

Cogstone requested a search of the California Historical Resources Information System (CHRIS)

from the Eastern Information Center (EIC) located at the University of California, Riverside on November 17, 2022, which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that two previous studies have been completed within the Project Area while an additional four studies have been completed previously within a half-mile radius of the Project Area.

No cultural resources have been recorded within the Project Area. Outside of the Project Area a total of 34 cultural resources have been previously documented within the half-mile search radius from the Project Area. These consist of 13 historic built environment resources and one historic archaeological site within a quarter mile of the Project Area, and 18 historic built environment resources and two historic archaeological sites within a quarter- to a half-mile of the Project Area.

Cogstone requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on November 17, 2022. The NAHC responded on November 9, 2022, that the results of the search were negative. The City of Banning is responsible for consultations to meet the requirements of Assembly Bill 52 (AB 52).

Cogstone archaeologists and cross-trained paleontologists Sandy Duarte and Christian Levine surveyed the entire Projects Area on April 6, 2023, using five-meter wide transects. Visibility was extremely poor (one percent or less) due to dense weed groundcover resulting from recent heavy rains. No cultural resources were observed during the pedestrian survey.

Based on a review of the results of the Sacred Lands File search, information from the EIC cultural records search, and review of USGS topographic quadrangle maps, the Project Area is assessed to have low sensitivity for buried prehistoric-aged cultural remains. Discoloration in USDA aerial photographs taken after the removal of the farms indicates the possibility of incomplete removal after demolition of the farms. The Project Area is assessed to have low to moderately low potential for buried historic-aged deposits such as foundations or trash pits.

Due to the low sensitivity for buried prehistoric-aged cultural deposits and low to moderately low sensitivity for buried historic-aged deposits, no additional work is required.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

INTRODUCTION

PURPOSE OF STUDY

This study was conducted to determine the potential impacts to cultural and paleontological resources during the Brown Strauss Industrial (Project) in the City of Banning (City), Riverside County, California (Figure 1). The City is the lead agency for the Project under the California Environmental Quality Act (CEQA).



Figure 1. Project vicinity map

PROJECT LOCATION AND DESCRIPTION

The Project is located within Assessor Parcel Numbers (APNs) 540-180-020, -022 and -026 located at 1219 and 1431 West Lincoln Street in the City of Banning, Riverside County, California. Specifically, it is located in the northern ½ of the southwestern ¼ of Section 9 of Township 2 South, Range 1 East on the Beaumont USGS 7.5-minute topographic quadrangle map, San Bernardino Baseline and Meridian (Figures 2, 3, and 4).

The Project involves the development of 14.92 gross acres of vacant land to construct a steel manufacturing and distribution facility. The total development proposal includes a 45,000 square foot warehouse, a 3,000 square foot office, two 500 square foot enclosed saw sheds, and an outdoor storage yard. The Project entitlements will require a General Plan amendment, zone change, and parcel merger. Maximum expected depth of ground disturbance is 18 to 20 feet.



Figure 2. Project location map



Figure 3. Aerial map



Figure 4. Preliminary grading plan

PROJECT PERSONNEL

Cogstone Resource Management (Cogstone) conducted the cultural and paleontological resources study. Resumes of key personnel are provided in Appendix A.

- John Gust, RPA, served as the Task Manager, Principal Investigator for Archaeology, and co-authored this report. Dr. Gust has a Ph.D in Anthropology from the University of California (UC), Riverside and more than 11 years of experience in archaeology.
- Kim Scott served as the Principal Investigator for Paleontology for the Project. Ms. Scott holds an M.S. in Biology with an emphasis in paleontology from California State University (CSU), San Bernardino. She is a qualified vertebrate paleontologist and sedimentary geologist with more than 28 years of experience in California paleontology and sedimentary geology.
- Sandy Duarte co-authored this report and conducted the pedestrian survey. Mrs. Duarte holds a B.A. in Anthropology from the UC Santa Barbara, and has more than 19 years of experience in California archaeology.
- Shannon Lopez conducted historic society consultation letters for this Project. Ms. Lopez holds an M.A. in History from CSU Fullerton and has more than five years of experience as an architectural historian.
- Kelly Vreeland drafted the geological and paleontological portions of this report. Ms. Vreeland has an M.S. and B.S. in Geology, with an emphasis in paleontology, from CSU Fullerton, as well as 12 years of experience in California paleontology and geology.
- Logan Freeberg conducted the archaeological and paleontological record searches and prepared the maps for the report. Mr. Freeberg has a certificate in Geographic Information Systems (GIS) from CSU Fullerton and a B.A. in Anthropology from UC Santa Barbara and has more than 20 years of experience in southern California archaeology.
- Debbie Webster provided technical editing. Ms. Webster has more than 22 years of experience in technical writing.
- Molly Valasik was Task Manager for the Project and provided overall QA/QC. Ms. Valasik has an MA in Anthropology from Kent State University in Ohio and over 14 years of experience in southern California archaeology.
- Eric Scott provided QA/QC of the paleontology and geology sections of this report. Mr. Scott has an M.A. in Anthropology, with an emphasis in biological paleoanthropology, from University of California, Los Angeles (UCLA), and more than 39 years of experience in California paleontology.

REGULATORY ENVIRONMENT

STATE LAWS AND REGULATIONS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

TRIBAL CULTURAL RESOURCES

As of 2015, CEQA established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code, § 21084.2). In order to be considered a "tribal cultural resource," a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

PUBLIC RESOURCES CODE

<u>Section 5097.5</u>: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic resources or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

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

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

NATIVE AMERICAN HUMAN REMAINS

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

- 1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
- 2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
- 3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;

- 4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
- 5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003; Scott et al. 2004).

BACKGROUND

GEOLOGIC SETTING

This Project is in one of the most tectonically active regions of North America. To the north of the Project the San Andreas Fault Zone traverses the Cajon Pass where it forms the boundary between the Pacific Plate and the North American Plate. The Transverse Ranges are a result of these two plates grinding past each other and "catching" along the bend in the San Andreas. The Pacific Plate is composed of numerous blocks that can move independently.

The Transverse Range Province is an east-west trending series of steep mountain ranges and valleys aligned obliquely to the normal northwest trend of coastal California mountains, hence the name "Transverse." The province extends offshore to include San Miguel, Santa Rosa, and Santa Cruz islands. At its eastern extension, the San Bernardino Mountains have been displaced to the south along the San Andreas Fault. Intense north-south compression is squeezing the Transverse Ranges, and as a result this is one of the most rapidly rising regions of the earth.

The Project is mapped entirely as late Pleistocene (129,000 to 11,700 years ago, following Cohen et al. 2023) alluvial fan deposits of San Gorgonio Pass (Dibblee and Minch 2003). These alluvial sediments consist of sand and gravel deposits of plutonic and gneissic detritus originating from the San Bernardino Mountains to the north. The fans are slightly indurated, and they are slightly dissected by stream channels (Dibblee and Minch 2003).

PALEONTOLOGICAL SETTING

Pleistocene sediments elsewhere throughout Riverside County are known to yield diverse extinct large mammals from the last Ice Age including mammoth, mastodon, ground sloth, dire wolf, short-faced bear, sabre-toothed cat, western horse, camel, and bison (Springer et al. 2009, 2010). Numerous still living species of small vertebrates and invertebrates have also been recovered from these deposits.

ENVIRONMENTAL SETTING

The Project Area is located in the San Gorgonio Pass region formed by the San Andreas Fault, bound to the north by the San Bernardino Mountains and to the south by the San Jacinto and Santa Rosa Mountains; the eastern San Bernardino Valley is located to the west and the Coachella Valley, at the western edge of the Colorado Desert, is located to the east. The San Bernardino Mountains are the easternmost in the Transverse Range, extending approximately 60 miles east-west along on the southern edge of the Mojave Desert in southwestern San Bernardino County, north of the city of San Bernardino. The San Jacinto and Santa Rosa Mountains is San Gorgonio Mountain at an elevation of 11,502 feet above mean sea level, the highest peak in southern California (Goldberg et al. 2001). The nearby Big Morongo Canyon Preserve (BMCP) has a rich diversity of wildlife which includes over 247 bird species, as well as several mammals, including mule deer, desert bighorn sheep, and large carnivores, including black bears, coyotes, bobcats, badgers, kit fox, and gray fox, exist in the preserve. A wide variety of reptiles can be found in the area as well (BMCP 2022).

PREHISTORIC SETTING

The latest cultural revisions for the Project Area define traits for time phases of the Greven Knoll Pattern of the Encinitas Tradition applicable to inland San Bernardino, Riverside, Los Angeles and Orange counties (Sutton and Gardner 2010). This pattern is subsequently replaced in the Project Area by the Peninsular Pattern of the Palomar Tradition later in time (Sutton 2011; Table 1).

| Phase Dates | | Material Culture | Other Traits | | |
|-------------------|-------------------|--|---|--|--|
| | B.P. | | | | |
| Greven Knoll I | 8,500 to 4,000 | Abundant manos and metates; Pinto dart points for atlatls or spears; charmstones, cogged stones, and discoidals rare; no mortars or pestles; and general absence of shell artifacts. | No shellfish; hunting important; flexed inhumations; and cremations rare. | | |

| TABLE 1. | CULTURAL PATTERNS AND PHASES |
|----------|------------------------------|
|----------|------------------------------|

| Phase | Dates | Material Culture | Other Traits |
|--|-------------------|--|--|
| | B.P. | | |
| Greven Knoll II | 4,000 to 3,000 | Abundant manos and metates; Elko dart points for atlatls or spears; core tools; late discoidals; few mortars and pestles; and general absence of shell artifacts. | No shellfish; hunting and gathering important; flexed inhumations; and cremations rare. |
| Greven Knoll III (formerly Sayles complex) | 3,000 to 900 | Abundant manos and metates; Elko dart points for atlatls or spears; scraper planes, choppers, and hammerstones; late discoidals; few mortars and pestles; and general absence of shell artifacts. | No shellfish; yucca and seeds as staples; hunting important but animal bones also processed; flexed inhumations beneath rock cairns; and cremations rare. |
| Peninsular I | 900 to 750 | Appearance of small points (Cottonwood points and Desert Side-notched) for arrows; shaft straighteners; pottery; few stone ornaments or stone pipes; appearance of shell ornaments; use of obsidian glass from Coso, Obsidian Butte, Bagdad, and unknown sources; and use bedrock metates but few mortars and pestles. | Adoption of a lacustrine-based subsistence system; movement of people into the northern Coachella Valley from the interior valleys as Lake Cahuilla filled; establishment of major residential bases along the Lake Cahuilla shoreline; and primary pit cremations. |
| Peninsular II | 750 to 300 | Addition of brown ware pottery, ceramic pipes and figurines; use of same obsidian sources; and the use of stone fish traps as levels of Lake Cahuilla fluctuated and eventually declined. | Lacustrine based subsistence; and the appearance of the Peninsular Funerary Complex, with secondary cremations placed in ceramic "containers" and associated mourning ceremonies. |
| Peninsular III | 300 to 150 | Continued use of Cottonwood and Desert Side-notched points; brown ware and buff ware pottery; primary use of Obsidian Butte as an obsidian source; addition of new figurine types; addition of some cultigens such as melons and squash, and the introduction of Euro-American material culture (e.g., glass beads and metal tools). | Adoption of terrestrial-based subsistence system; full-time villages near springs; movement of some people west into the northern Peninsular Ranges as Lake Cahuilla became desiccated; use of domesticated species obtained from Colorado River Yumans and Euro- Americans; primary pit cremation as the principal mortuary practice; and retention of mourning ceremonies. |

Greven Knoll sites tend to be located in the inland valley areas characteristic of the Project Area. These inland people apparently did not switch from the use of manos and metates to the use of pestles and mortars that is seen in coastal sites dating to approximately 5000 years ago, possibly reflecting their closer relationship with desert cultural peoples who did not exploit acorns. The Greven Knoll toolkit is dominated by manos and metates throughout its 7,500 year extent. In Phase I, other typical characteristics were pinto dart points for atlatls or spears, charmstones, cogged stones, absence of shell artifacts, and flexed position burials. In Phase II, Elko dart points for atlatls or spears and core tools are observed along with increased indications of gathering. In Phase III, stone tools including scraper planes, choppers and hammerstones are added to the toolkit, and yucca and plant seeds are staple foods, animal bones are heavily

processed (broken and crushed to extract marrow), and burials tend to be marked by stone cairns (Sutton and Gardner 2010).

Early Peninsular sites tend to be near sources of freshwater in valleys. The former Lake Cahuilla played a major role in the prehistory of the Colorado Desert. As detailed above, Lake Cahuilla formed periodically when the Colorado River broke its channel and flowed into the Salton Trough of the Coachella and Imperial Valleys, forming a large, deep body of fresh water. Sutton (2011) suggests that some San Luis Rey I people of Yuman descent split away and migrated east to the northern Peninsular Ranges and the northern Coachella Valley to exploit Lake Cahuilla, and in so doing became Peninsular I. The Peninsular Pattern then developed through the Peninsular I, II and III phases (Sutton 2011).

The Peninsular I phase is marked by small points for arrows, the appearance of bedrock mortars indicating use of acorns, pottery, the appearance of shell ornaments, and pit cremations are common. Hunting and gathering of terrestrial resources and the exploitation of Lake Cahuilla's lacustrine resources resulted in the development of new technologies for waterfowl decoys and fish traps and/or nets. The Peninsular II phase has some important new material traits including brown ware pottery, ceramic pipes and figurines, and secondary burials in containers. The Peninsular III phase reflects the archaeological signature of the ethnographic groups that had become established in Peninsular I and II phases with the addition of some Euro-American material culture (Sutton 2011).

ETHNOGRAPHY

CULTURAL AFFILIATION

A review of the ethnographic literature identifies the Project Area as being within the traditional territory of the Cahuilla (Figure 5; Strong 1929; Bean 1978:576) while others identify the area as being within Serrano Territory (Figure 6; Benedict 1924). Locating the tribal use of the Project Area is further complicated by Spanish colonization and the displacement of the Native American communities through the American Period.



Figure 5. Cahuilla territory showing approximate location of Project Area (Bean 1978)



Figure 6. Serrano Territory (Benedict 1924:367)

CAHUILLA

The Cahuilla occupied the San Gorgonio Pass (referred to as the Pass Cahuilla), San Jacinto and Santa Rosa Mountains (Mountain Cahuilla), and the Coachella Valley and the northern end of Imperial Valley (Desert Cahuilla). The Project Area is identified as being within Pass Cahuilla Territory (Figure 7). The Cahuilla are linked to other Takic language family groups such as the Serrano and Luiseño and share many aspects of culture and religion with those tribes.



Figure 7. Serrano and Cahuilla territory showing approximate location of Project Area (from Drucker 1937: Figure 1)

Each person's primary identity was linked to clan lineage and moiety rather than overall tribal affiliation. The two moieties of the Cahuilla were *Istam* (coyote) and *Tuktum* (wild cat). Affiliation was inherited from the father's moiety and members of one moiety had to marry into the other group. Each clan was an independent, politically autonomous land-holding unit (Bean and Saubel 1972; Bean 1978; Strong 1929).

In addition to lineage residence areas and clan territory owned in common with other clan members, each lineage had ownership rights to various food collecting and hunting areas. Individuals also "owned" specific areas rich in plant resources, as well as hunting grounds, rock quarry locations, and sacred spots used only by shamans, healers, and ritual practitioners.

Cahuilla clans varied in size from several family groups to those composed of several thousand people. Clans were generally situated so that each lineage or community was located near a reliable water source and in proximity to significant food resources. Within each community, house structures were spatially placed at some distance from each other. Often a community would spread over a mile or two in distance with each nuclear and extended family having homes and associated structures for food storage and shaded work places (ramadas) for tool manufacture and food processing. Each community also contained a house clan leader.

In more recent times, a ceremonial house (*kishumnawat*) was placed within each community, and most major religious ceremonies of the clan were held there. In addition, house and ceremonial structures, storage granaries, sweat houses, and song houses (for recreational music) were present. Usually an area within one to three miles contained the bulk of materials needed for daily subsistence, although territories of a given clan might be larger, and longer distances were traveled to get precious exotic resources, usually found in the higher elevations of the surrounding mountains.

While most daily secular and religious activities took place within the community, there were locations at some distance from the community where people camped for extended periods to harvest acorns or piñon nuts. Throughout the area, there were sacred places used primarily for rituals, intergroup or inter-clan meetings, caches for sacred materials, and locations for use by shamans or medicine men. Generally, hilly, rocky areas, cave sites, or walled cave sites were used for temporary camping, storage of foods, fasting by shamans, and as hunting blinds.

Between the mid-1500s and the 1800s, the Cahuilla were variously contacted by Spanish explorers, then Mexican ranchers, and later American settlers. By the mid-1800s, the Cahuilla were fully exposed to new peoples with new cultural ways, opportunities, and constraints. In the 1860s, several epidemics devastated the Cahuilla population and the increasing contact with Europeans continued to have a major impact on their traditional lifeway. Survivors of decimated

Cahuilla clans joined villages that were able to maintain their ceremonial, cultural, and economic institutions (Bean 1978). Today there are 2,996 (alone) people who identify as Cahuilla (4,238 in any combination) according to the 2010 United States Census (United States Census Bureau 2006-2010).

SERRANO

The name Serrano comes from a Spanish word meaning "mountaineer" or "highlander" because their villages were located within the San Bernardino Mountains as well as its northern and southern slopes. The Serrano designation also includes the Kitanemuk, Vanyume, and Alliklik communities (Strong 1929:5). In addition to the San Bernardino Mountains and its foothills, Serrano territory extended south to Yucaipa Valley, east to the Mojave River watershed, and north to the Twentynine Palms region (Bean and Smith 1978:570). The Serrano language is part of the Takic subfamily of the larger Uto-Aztecan language family. The traditional name used to identify the Serrano is Maara'yam.

Historically, the Serrano were nomadic and migrated to the cool, pine forests of the San Bernardino Mountains during the summer and returned to the desert regions during the winter. Most Serrano village sites were located in the foothills of the upper Sonoran zone with a few outliers located near permanent water sources on the desert floor, or in the forest transition zone (Bean and Smith 1978:570).

The Serrano traded with the Mojave to the east and the Gabrielino/Tongva to the west. They also traded with their close neighbors, the Cahuilla in the San Jacinto and Santa Rosa Mountains, the Banning Pass area, and the greater Coachella Valley. In addition, the Serrano traded with the Chemehuevi who occupied the lower Colorado River region, some of whom migrated westward towards the Project study area.

Prior to European contact, the Serrano were primarily hunters and gatherers. Women were responsible for most of the gathering and acorns, piñon nuts, and mesquite beans were collected as staple foods. Spring cactus fruits and berries were consumed fresh for both food and water. Flower blossoms were roasted and eaten. Yucca blossoms and stalks were blanched before being eaten. Roots were used for food and medicine, and leaves and stems were used for making tea. Digging sticks were frequently used to dig for plants and roots for subsistence and medicinal purposes (Johnston 1965:8). One main seed resource was chia, and stands of chia were periodically burned in order to increase yield. Other major plant foods included mesquite beans and the nuts from piñon pine and acorn. Acorns were leached by placing baskets of pounded and shelled acorn meal into a sandy hole with just enough water to allow the dissolved tannic acid to seep out. Other plant seeds were parched and made into a mush by boiling or cooking and dropping a heated stone into a water-tight basket filled with seeds and water. Some seeds were dried and stored in baskets. Baskets were made from willow and mesquite branches and woven with bone awls.

Because of their migratory nature, the Serrano and neighboring tribes "cached" many of their possessions and provisions instead of transporting these often heavy items long distances. These "caches" were guarded by "spirit sticks" that were left upright adjacent to the cache. Today there are 324 (alone) people who identify as Serrano (514 in any combination) according to the 2010 United States Census (United States Census Bureau 2006-2010).

HISTORIC SETTING

SPANISH PERIOD (1769-1822)

The earliest explorations of California occurred in 1542, when Juan Rodríguez Cabrillo and his party landed near Point Loma. Cabrillo had been tasked by the Spanish monarch with exploration of the western United States interior. Interaction with the native population was initiated, but intensive exploration and colonization of California by Spain did not occur until the 1700s.

In 1769, the Spanish developed plans to build three towns and four presidios (forts) along the California coastline stretching from San Diego northward to Monterey. The town sites, established between 1777 and 1797, included present-day Los Angeles, San Jose, and a small town near Santa Cruz named Branciforte. The presidios were established at San Diego, Santa Barbara, Monterey, and San Francisco. Under Spain, the borderlands were colonized as defenses against the intrusion of the English, French, Dutch, and Russians, with the Manila trade an important item for protection in California. They were held by two typical institutions: the mission and the presidio (Bolton 1913, 1921, 1930 as cited in Aviña 1976).

Mission San Gabriel was founded in 1771 and was the fourth of 21 Franciscan missions built in California. The goals of the missions were tri-fold: they established a Spanish presence on the west coast, provided a way to Christianize native peoples, and served to exploit native population as laborers. The mission system severely disrupted the Native socio-political structure, especially those living in close proximity (Loumala 1978:595).

Arrival of the Franciscan missionaries during the Spanish period resulted in far-reaching alterations in Native American lifeways. These shifts included high mortality rates and social changes due to the introduction of European diseases and customs (e.g., European farming methods; Dobyns 1983; Walker and Hudson 1989). Due to the high mortality rates, many Native American villages were abandoned, with inhabitants fleeing to the missions:

"As the Native Americans watched the Europeans remain healthy during the epidemics, they began to view disease as a form of divine punishment for human transgressions" (Dobyns 1983). "Believing that the Christian God held a power greater than their own, the Natives willingly joined the Spanish missions" (Rushing 1995:15).

The Native population decreased as a consequence of a series of epidemics, and their traditional lifestyle was severely altered as neophytes were converted to Christianity and forced to work for the mission.

In 1819, the San Bernardino Asistencia, a satellite rancho associated with Mission San Gabriel, was established (California Office of Historic Preservation n.d.). Located in what is now Redlands, California, approximately 20 miles west-northwest of the Project Area, this complex was the easternmost outpost of the Mission San Gabriel. Its lands were used for cattle grazing and as a place to round up the Cahuilla and Serrano as labor.

Mexican Period (1822-1847)

After Mexico gained independence from Spain in 1821, major efforts were taken by the Mexican government to establish reliable land routes throughout Alta California. In the 1920s, a group of soldiers was dispatched from Sonora to do just that. The group documented new routes through San Diego County, Riverside County, through Mission San Gabriel and up to the pueblo of Los Angeles. In the early days, this route through Southern California was known as "El Camino Real" and would later be known as Sonora Road, the Colorado Road, and the Los Angeles to Yuma Road (Lech 2012).

The use of this new road resulted in a substantial increase to Riverside County's population. New settlers purchased land and built their homes along the road which doubled as way stations for travelers. In 1826, the Mexican government declared that Sonora Road would serve as the official mail route between Mexico and California. In the hopes of staving off encroachment by the ever expanding United States, the Mexican government was eager to entice its own settlers to travel north and populate California. However, this proved difficult as the best land in the region was already claimed by the numerous missions located there. As a response, in 1826, California Governor Jose Maria Echeandia announced a plan to secularize the missions and use the inhabitants to establish Native American village settlements. The same year, Governor Echeandia authorized a partial emancipation decree which allowed some "Mission Indians" to leave their missions and find work for Hispanic settlers. The partial emancipation policy began in the Monterey district and was later implemented elsewhere (Milliken et al. 2009).

In 1833, the southern Mission Prefect Narciso Duran wrote of the contrast of the quality of life of the natives that remained at the mission versus who were "emancipated" and worked in the pueblo of Los Angeles:

"I have seen with the greatest amazement that [the Indians who dwell in the pueblo of Los Angeles] . . . live far more wretched and oppressed than those in the missions. There is not one who has a garden of his own, or a yoke of oxen, a horse, or a house fit for a rational being. The equality with the white people, which is preached to them,

consists in this, that these Indians are subject to a white *comisionado*, and are the only ones who do the menial work . . . All in reality are slaves, or servants of white men who know well the manner of securing their services by binding them a whole year for an advanced trifle . . . The benevolent ideas of the Government will never be realized, because the Indian evinces no other ambition than to possess a little more savage license, even though it involved a thousand oppressions of servitude" (Milliken et al. 2009).

Following years of intense debate, the mission lands were secularized under the Secularization Act of 1833 and large portions of land reverted to the governor to parcel out as he saw fit. From 1834 to the end of the Mexican Period in 1946, approximately seven hundred land grants (ranchos) were issued to Mexican citizens (Lech 2012).

AMERICAN PERIOD (1848-PRESENT)

The Mexican-American war followed on the heels of the Bear Flag Revolt of June 1846 (Ohles 1997). General Andrés Pico and John C. Frémont signed the Articles of Capitulation in December 1847, and with the signing of the Treaty of Guadalupe Hidalgo in February 1848, hostilities ended and Mexico relinquished California to the United States. Under the treaty, Mexico ceded the lands of present-day California, Arizona, New Mexico and Texas to the United States for \$15 million (Fogelson 1993:10). Within two years following the treaty, California applied for admission as a state.

Following vast territorial gains, a flood of American, European, and Asian settlers moved west. With the discovery of gold in California in 1849, by the following year, 100,000 settlers, all seeking gold, descended on California. Due to a lack of governmental authority and oversight, there was widespread killing of natives and kidnapping of native children by miners (Castillo 2022).

In 1851, the State of California in conjunction with two senators in the United States Senate overturned multiple treaties that had been previously negotiated and signed by the Native Americans of California. As a result, until the 1870s, local tribes had no legal standing with the government until a presidential executive order was signed which established reservations for multiple tribes.

A successful citrus industry was established in Riverside County in the 1870s. Extensive orange, lemon, and lime groves occupied vast tracts of land which required long hours and hard work to maintain. For the first decade of Riverside County's citrus boom, Native Americans provided the primary source of labor, working as irrigators, pickers, and packers until they were replaced by Chinese immigrants in the 1880s (Rincon Consultants, Inc. 2018).

Throughout the 19th and 20th centuries, Native Americans of Riverside County made a living on and off their reservations as farm laborers, cowboys, artists, merchants, teamsters, rail workers, etc. (Trafzer and Smith 2006).

PROJECT AREA HISTORY

The Pacific Railroad passes through the northern portion of the Project Area in the 1901 San Jacinto (1:125,000), and 1901 and 1904 Southern California (1:250,000) United State Geological Survey (USGS) topographic quadrangle maps. An intermittent water course that passes through the western half of the Project Area is noted in the 1952 Banning (1:62,500) and 1965 Santa Ana (1:250,000) USGS topographic quadrangle maps. The 1966, 1967, 1972, and 1985 United States Department of Agriculture (USDA) historic aerial photographs show two farms at the east end of the Project Area and one in the western portion (NETROnline 1966, 1967, 1972, 1985), with all of them being near West Lincoln Street. A wide strip of land is under active cultivation around the western farm in the 1967 photograph. The main buildings that are associated with the three farms are depicted on the Beaumont (1:24,000) USGS topographic quadrangle maps from 1972, 1979, 1988, and 1996. The Pacific Railroad track also shifts north and out of the Project Area in these maps. It is unclear if this is due to rail replacement, but is more likely due to mapping error in the earlier maps. The Project Area is empty in the 1996 USDA aerial photograph except for some discoloration around where the buildings were once located. USDA aerial photographs from 1996, 2000, 2002, 2005, and 2009 show that between 1996 and 2000 the western approximately 60 percent of the Project Area was used as a metal supply yard, that between 2000 and 2002 the yard grew to cover the entire Project Area, and between 2005 and 2009 this use was discontinued and all stock was removed (NETROnline 1996, 2000, 2002, 2005, 2009). Two trailers are visible in the 2018 USDA aerial photograph in the western half of the Project Area. The Project Area shows no sign of use or activity, other than possible brush control, in USDA aerial photographs taken after 2009 (NETROnline 2009, 2010, 2012, 2014, 2016, 2018, 2020).

RECORDS SEARCH

PALEONTOLOGICAL RECORD SEARCH

The results of the record search showed that no fossils have been recovered from the proposed Project Area or from within a one-mile radius (Stoneburg 2022). However, Pleistocene sediments have produced fossils nearby (Appendix B). Remains of mammoth (†*Mammuthus* sp.) were reported from the city of Riverside (UCMP 2023). Cogstone recovered horse remains (†*Equus occidentalis*) from desert loess-like deposits on Pachappa Hill (Scott et al. 2014). Specimens of extinct sabre-toothed cat (†*Smilodon* sp.) was recovered from the south end of Fontana (Scott 2008). Finally, mastodon (†*Mammut* sp.), bison (†*Bison* sp.), and camel (†*Camelops* sp.) fossils were recovered from western Fontana (Scott 2008; Table 2).

Late Pleistocene fossils have been found in association with the Diamond Valley Lake and San Diego Pipeline 6/Salt Creek Channel projects in southern Hemet, California, approximately 15 miles southwest of the current Project. Thousands of Pleistocene fossils including California turkey (†*Meleagris californica*), ground sloths (†*Megalonyx jeffersonii*, †*Nothrotheriops shastensis*, †*Paramylodon harlani*), sabre-toothed cat (†*Smilodon fatalis*), dire wolf (†*Aenocyon dirus*), short-faced bear (†*Arctodus* sp.), horses (†*Equus conversidens*, †*Equus occidentalis*), stilt-legged llama (†*Hemiauchenia macrocephala*), yesterday's camel (†*Camelops hesternus*), flat-headed peccary (†*Platygonus compressus*), diminutive pronghorn (†*Capromeryx minor*), bison (†*Bison antiquus*, †*Bison latifrons*), Pacific mastodon (†*Mammut pacificus*), and Columbian mammoth (†*Mammuthus columbi*) were recovered from this project (Springer et al. 2009, 2010; Table 2).

| | Group | Common Name | Vertebrate Taxon |
|---|-------|----------------------------|----------------------------------|
| ľ | SU | salamander | Urodela |
| | ibia | western spadefoot toad | Scaphiopus hammondii |
| | iqdu | likely western toad | Anaxyrus sp. Cf. A. boreas |
| | an | likely California treefrog | Pseudacris sp. Cf. P. cadaverina |
| | | pond turtle | Actinemys sp. |
| | | desert tortoise | ‡Gopherus agassizii |
| | | whiptailed lizard | Aspidoscelis tigris |
| | | alligator lizard | <i>Elgaria</i> sp. |
| | | collared lizard | Crotaphytus collaris |
| | | coast horned lizard | Phrynosoma coronatum |
| | | likely sagebrush lizard | Sceloporus sp. cf. S. graciosus |
| | SS | western fence lizard | Sceloporus occidentalis |
| | ptile | side-blotched lizard | Uta stansburiana |
| | re | iguana | Iguanidae |
| | | kingsnake | Lampropeltis sp. |
| | | whipsnake | Masticophis sp. |
| | | pine snake | Pituophis melanoleucus |
| | | blackhead snake | <i>Tantilla</i> sp. |
| | | garter snake | Thamnophis sp. |
| | | likely sidewinder | Crotalus sp. Cf. C. cerastes |
| | | rattlesnake | Crotalus sp. |
| | | duck | Anas sp. |
| | | California turkey | †Meleagris californica |
| | sp | golden eagle | Aquila chrysaetos |
| | bir | likely Cooper's hawk | Accipiter sp. Cf. A. cooperi |
| | | falcon | Falco sp. |
| | | shore bird | Scolopacidae |
| | | | |

 Table 2. Pleistocene Fossils from the Diamond Valley Reservoir and San Diego Pipeline 6/

 Salt Creek Channel Projects

| dno | | | | |
|------|----------------------------|-----------------------------------|--|--|
| Gr | Common Name | Vertebrate Taxon | | |
| | likely short-eared owl | Asio sp. Cf. A. flammeus | | |
| | northern flicker | Colaptes auratus | | |
| | Steller's jay | Cyanocitta stelleri | | |
| | common raven | Corvus corax | | |
| | raven | Corvidae | | |
| | swallow | cf. Hirundo sp. | | |
| | swallow | Hirundinidae | | |
| | likely American robin | cf. Turdus migratorius | | |
| | likely western meadowlark | cf. Sturnella neglecta | | |
| | Jefferson's ground sloth | †Megalonyx jeffersonii | | |
| | Shasta's ground sloth | <i>†Nothrotheriops shastensis</i> | | |
| | Harlan's ground sloth | †Paramylodon harlani | | |
| | black-tailed jackrabbit | Lepus californicus | | |
| | desert cottontail | Sylvilagus audubonii | | |
| | antelope ground squirrel | ‡Ammospermophilus sp. | | |
| | California ground squirrel | Otospermophilus beecheyi | | |
| | ground squirrel | Otospermophilus sp. | | |
| | Beechey's ground squirrel | Eutamius sp. | | |
| | kangaroo rat | Dipodomys sp. | | |
| | Pocket mouse | Perognathus sp. | | |
| | Botta's pocket gopher | Thomomys bottae | | |
| | California meadow vole | Microtus californicus | | |
| | dusky-footed wood rat | Neotoma fuscipes | | |
| | desert wood rat | Neotoma lepida | | |
| | likely canyon mouse | Peromyscus sp. Cf. P. crinitus | | |
| ıals | harvest mouse | Reithrodontomys sp. | | |
| uuu | ornate shrew | Sorex ornatus | | |
| mε | broad-footed mole | Scapanus latimanus | | |
| | mouse-eared bat | Myotis sp. | | |
| | bobcat | Lynx rufus | | |
| | sabre-toothed cat | †Smilodon fatalis | | |
| | coyote | Canis latrans | | |
| | dire wolf | †Aenocyon dirus | | |
| | grey fox | Urocyon cinereoargenteus | | |
| | likely short-faced bear | cf. † <i>Arctodus</i> sp. | | |
| | black bear | ‡Ursus americanus | | |
| | skunk | Mephitis sp. | | |
| | long-tailed weasel | Mustela frenata | | |
| | badger | Taxidea taxus | | |
| | Mexican ass | †Equus conversidens | | |
| | western horse | †Equus occidentalis | | |
| | stilt-legged llama | †Hemiauchenia macrocephala | | |
| | yesterday's camel | <i>†Camelops hesternus</i> | | |
| | flat-headed peccary | †Platygonus compressus | | |

| dno | | |
|---------------|----------------------|------------------------|
| Gr | Common Name | Vertebrate Taxon |
| | diminutive pronghorn | †Capromeryx minor |
| pronghorn | | ‡Antilocapra americana |
| mule deer | | Odocoileus hemionus |
| antique bison | | †Bison antiquus |
| | long-horned bison | †Bison latifrons |
| | Pacific mastodon | †Mammut pacificus |
| | Columbian mammoth | †Mammuthus columbi |

Notes and Abbreviations:

 \dagger = the taxon is extinct, although there may be living relatives in same genus or family

‡ = animal extirpated

sp. = genus certain but species uncertain

cf. = compares favorably with or likely

From Springer et al. (2009, 2010)

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

Cogstone requested a search of the California Historical Resources Information System (CHRIS) from the Eastern Information Center (EIC) located at the University of California, Riverside on November 17, 2022, which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that two previous studies have been completed within the Project Area while an additional four studies have been completed previously within a half-mile radius of the Project Area (Table 4).

| Report No. (RI-) | Author(s) | Title | Year | Distance (miles) from Project Area |
|------------------------|---|--|------|--|
| 02350 | Rebecca McCorkle Apple and Jan E. Wooley | MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California | 1988 | Within |
| 07339 | Tang, Bai "Tom", Josh Smallwood, and Melissa Hernandez | Identification and Evaluation of Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, California | 2007 | 0-0.25 |
| 08012 | Roderic McLean, Shannon Carmack, Phil Fulton, Maria Aron, Jay Michalsky, Daniel Ewers, Casey Tibbet, and Brook Smith | Supplemental Cultural Resource Assessment, Oak Valley Substation Project, San Bernadino and Riverside Counties | 2008 | 0-0.25 |

Table 4. Previous studies within a half mile radius of the Project Area

| Report No. (RI-) | Author(s) | Title | Year | Distance (miles) from Project Area |
|------------------------|---|---|------|--|
| 08449 | Bai "Tom" Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain | Cultural Resources Technical Report City of Banning General Plan | 2004 | Within |
| 09317 | Carrie D. Wills | Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate 'Monroe', 1170 West Ramsey Street, Banning, Riverside County, California, EBI Project No. 61140883 | 2014 | 0-0.25 |
| 09540 | David Brunzell | Cultural Resources Assessment Rancho San Gorgonio Planned Community Project City of Banning, Riverside County, Riverside County, California | 2013 | 0.25 - 0.5 |

No cultural resources have been recorded within the Project Area (Appendix C, Table C-1). Outside of the Project Area a total of 34 cultural resources have been previously documented within the half-mile search radius from the Project Area (Appendix C, Table C-1). These consist of 13 historic built environment resources and one historic archaeological site within a quartermile of the Project Area, and 18 historic built environment resources and two historic archaeological sites within a quarter- to a half-mile of the Project Area.

OTHER SOURCES

In addition to the EIC records search, a variety of sources were consulted in April 2023 to obtain information regarding the cultural context of the Project vicinity (Table 5). Sources included the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Specific information about the Project Area, obtained from historic-era maps and aerial photographs, is presented in the Project Area History section.

| Source | Results | | |
|--|----------------------------------|--|--|
| National Register of Historic Places (NRHP) | negative | | |
| Historic USGS Topographic Maps | see Project Area History section | | |
| Historic US Department of Agriculture Aerial | see Project Area History section | | |
| Photographs | | | |
| California Register of Historical Resources (CRHR) | negative | | |
| Built Environment Resource Directory (BERD) | negative | | |
| California Historical Landmarks (CHL) | negative | | |
| California Points of Historical Interest (CPHI) | negative | | |
| Bureau of Land Management (BLM) General Land | positive, see Table 6 | | |
| Office Records | | | |

Table 5. Additional sources consulted

| Name | Year | Accession Number | Туре | T; R; Section |
|------------------|------|------------------|--------------------|-------------------|
| Southern Pacific | 1866 | CACAAA 072566 | United States Land | Township 2 South; |
| Railroad Company | | | Grant | Range 1 East; |
| | | | | Section 9 |

In 1866, the Southern Pacific Railroad Company was given a United States government grant totaling 24,642.11 acres that included the Project Area.

HISTORICAL SOCIETIES CONSULTATION

The San Gorgonio Pass Historical Society was contacted on April 13, 2023 via United States Postal Service certified mail, and on April 26, 2023 and May 5, 2023 via electronic mail (Appendix D). The Society acknowledged receipt of the requests, but no further response has been received.

SACRED LANDS FILE SEARCH

Cogstone requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on November 17, 2022. The NAHC responded on November 9, 2022, that the results of the search were negative (Appendix E). The City of Banning is responsible for consultations to meet the requirements of Assembly Bill 52 (AB 52).

SURVEY

METHODS

The survey stage is important in a Project's environmental assessment phase to verify the exact location of each identified cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources sensitivity. All undeveloped ground surface areas within the ground disturbance portion of the Project Area were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the Project Area, including ground surface visibility and items of interest, were taken with a digital camera.

Sandy Duarte and Christian Levine surveyed the entire Project Area on April 6, 2023, using fivemeter wide transects (Figures 8, 9, and 10). Visibility was extremely poor (one percent or less) due to dense weed groundcover resulting from recent heavy rains. When visible, sediments were consistent with geologic mapping by Dibblee and Minch (2003) and consisted of sand to gravel sized alluvial fan sediments (Figure 11).



Figure 8. Project Area overview, view to the north



Figure 9. Project Area overview, view to the southeast



Figure 10. Project Area overview, view to the west



Figure 11. Sediments within Project Area

RESULTS

No cultural or paleontological resources were observed during the pedestrian survey.

STUDY FINDINGS AND CONCLUSIONS

PALEONTOLOGICAL SENSITIVITY

A multilevel ranking system has been developed by professional resource managers within the Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016; Appendix F) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a Project Area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria.

Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 mm in diameter or less. Moreover, fossil preservation also greatly increases after natural burial in rivers, lakes, or oceans. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. So the sands, silts, and clays of rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

Based on other recorded localities, Pleistocene fossils typically begin appearing about eight to ten feet deep in California valleys. Shallower sediments in the valleys usually do not contain the remains of extinct animals, although Holocene (less than 11,700 years old) remains may be present.

The late Pleistocene alluvial fan deposits of San Gorgonio Pass are assigned a moderate sensitivity (PFYC 3) based upon the age of the sediments and the documented presence of fossils from sediments of similar age near to the Project Area.

CULTURAL RESOURCES SENSITIVITY

Based on a review of the results of the Sacred Lands File search, information from the EIC cultural records search, and review of USGS topographic quadrangle maps, the Project Area is assessed to have low sensitivity for buried prehistoric-aged cultural remains. Discoloration in

USDA aerial photographs taken after the removal of the farms indicates the possibility of incomplete removal after demolition of the farms. The Project Area is assessed to have low to moderately low potential for buried historic-aged deposits such as foundations or trash pits. The City of Banning General Plan (Banning and Terra Nova 2006:IV-58, Exhibit IV-6) assesses the cultural sensitivity of the Project Area to be low.

RECOMMENDATIONS

PALEONTOLOGICAL RESOURCES RECOMMENDATIONS

Based upon recorded fossil locality data in and near the Project Area, the late Pleistocene alluvial fan deposits of San Gorgonio Pass are here assigned a moderate paleontological sensitivity (PFYC 3). The Riverside County General Plan (County of Riverside 2015) listed this area as having an undetermined paleontological sensitivity, therefore, any fossils collected from this area would add to the understanding of the paleontological history of the area.

At present, based upon the potential for impacts to the late Pleistocene alluvial fan deposits of San Gorgonio Pass at depth within the Project Area, a Paleontological Resources Impact Mitigation Plan should be developed and implemented, which should include development of a paleontology Worker Environmental Awareness Program as well as paleontological monitoring.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified paleontologist can evaluate the find and make recommendations.

CULTURAL RESOURCES RECOMMENDATIONS

Due to the low sensitivity for buried prehistoric-aged cultural deposits and low to moderately low sensitivity for buried historic-aged deposits, no additional work is required.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

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APPENDIX A. QUALIFICATIONS



MOLLY VALASIK <u>QA/QC</u>

EDUCATION

2009 M.A., Anthropology, Kent State University, Kent, Ohio

2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

SUMMARY OF QUALIFICATIONS

Ms. Valasik is a Registered Professional Archaeologist (RPA) with more than 14 years of experience. She is a skilled professional who is well-versed in the compliance procedures of the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA) and regularly prepares cultural resources assessment reports for a variety of federal, state, and local agencies throughout California. Ms. Valasik has managed a variety of projects at Cogstone in the water, transportation, energy, development, and federal sectors. She meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*. She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation's Information Centers.

- **Creekside Specific Plan, City of San Juan Capistrano, Orange County, CA.** Cogstone conducted a study to determine the potential impacts to cultural and paleontological resources for the proposed demolition of an existing 123,000 square-foot building and construction of 188 residential units on 15.3 acres. Services included records searches, background research, and an intensive-level pedestrian survey. Based on the results of the record search and ethnographic data, it was found likely that substantive archaeological deposits exist. The project area was considered moderately sensitive for cultural and paleontological resources and archaeological and paleontological monitoring during all ground-disturbing activities was recommended. The City of San Juan Capistrano acted as lead CEQA agency. Sub to PlaceWorks. Principal Investigator for Archaeology. 2019-2020
- **Fire Station 172 Project, Rancho Cucamonga Fire Protection District, San Bernardino County, CA.** Cogstone determined the potential effects of paleontological, archaeological, and historical resources on the proposed project. The project involved relocation of the Fire Station from 9612 San Bernardino Road to 8870 San Bernardino Road. Services included the management of record searches, a Sacred Lands File search, a pedestrian survey, and completion of a cultural resources assessment report. Sub to Michael Baker International. Principal Investigator for Archaeology. 2018
- La Verne General Plan Update, City of La Verne, Los Angeles County, CA. Cogstone reviewed and summarized available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of La Verne to support an update of the City's General Plan. Cogstone conducted archaeological and paleontological record searches, extensive historical research at City Hall, a Sacred Lands File search was requested from the Native American Heritage Commission (NAHC), and a general analysis of impacts of future projects within the city that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to De Novo. Principal Investigator for Archaeology. 2018
- Magnolia Avenue Improvements, Caltrans District 8, City of Riverside, Riverside County, CA. For this local assistance project on behalf of the City of Riverside, the project involved producing an Archaeological Survey Report, Historical Resources Evaluation Report, and Historical Property Survey Report for Section 106 of the NHPA compliance. The City proposed widening Magnolia Avenue between Buchanan and Banbury by narrowing the existing median. Managed record search, Sacred Lands File search, Native American consultations, intensive-level pedestrian archaeological and architectural surveys, as well as coordination and approval by District 8 of an Area of Potential Effects (APE) map. The Historical Resources Evaluation Report included DPR series 523 forms for the evaluation of six properties all of which were determined not eligible for listing in the National Register. Sub to Michael Baker/PMC. Principal Investigator. 2016-2017



1990 M.A., Anthropology (Biological), University of California, Los Angeles

1985 B.A., Anthropology (Physical), California State University, Northridge

SUMMARY OF QUALIFICATIONS

Mr. Scott is a professional vertebrate paleontologist with 39 years of experience in paleontological mitigation, fieldwork, curation, and research. He is an emeritus paleontology curator of the San Bernardino County Museum, an adjunct at California State University, San Bernardino, and a research associate of the Natural History Museum of Los Angeles County and the La Brea Tar Pits and Museum, where he was lead excavator of the Pit 91 excavation from 1985-1991. He is a 30+ year member of the Society of Vertebrate Paleontology, an international society of professional scientists where he currently serves on the Government Affairs Committee; he also holds membership in the Geological Society of America and other professional societies. Mr. Scott has published over 40 research articles in professional scientific journals.

- Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, Worker Environmental Awareness Program training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). Program Manager. 2016-ongoing
- Los Angeles World Airports (LAWA) Ongoing Technical Support for Environmental, Mitigation Reporting, and Sustainability Issues Associated with LAWA Construction Projects, LAX, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring during proposed consolidation and modernization of existing facilities. The project involved redeveloping multiple facilities including hangars and associated structures for Delta Airlines and United Airlines, among others. Upon completion of monitoring, Cogstone prepared Cultural and Paleontological Resources Monitoring Compliance Reports. The City of Los Angeles acted as lead agency for the project. Sub to CDM Smith. Program Manager. 2019-2021
- **Deep Soil Mixing Pilot Project, Community of Pacific Palisades, Los Angeles County, CA.** As part of an on-call contract with the Los Angeles Bureau of Engineering (LABOE), Cogstone provided cultural and paleontological resources monitoring as well as managed Native American monitoring during ground-disturbing activities. The City of Los Angeles was the lead agency under the California Environmental Quality Act. Monitoring for the Project was conducted in compliance with the Contingency Plan conditions for the Coastal Development Permit from the California Coastal Commission. No cultural or paleontological resources were identified. No further work was necessary. Sub to ICF. Principal Investigator for Paleontology. 2020
- Gates Canyon Stormwater Capture Project, unincorporated area of Calabasas, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring for 31 days during proposed improvements to Gates Canyon Park that will allow the capture and storage of stormwater runoff from an adjacent 105-acre residential area. Monitoring complied with program mitigation measures and as defined by the County of Los Angeles, Department of Public Works (LACDPW). LACDPW was the project proponent and acted as the lead agency under the California Environmental Quality Act. Sub to Aspen Environmental. Task Manager. 2019
- Eastside Reservoir Project (Diamond Valley Lake), City of Hemet, Riverside County, CA. The project developed southern California's largest freshwater reservoir. Paleontological monitoring and mitigation provided by San Bernardino County Museum. Supervised fieldwork, conducted and supervised lab work, wrote weekly, annual, and final reports. Paleontology Curator, Field Supervisor, and Report Author. 1993-2003



- 2016 Ph.D., Department of Anthropology, University of California, Riverside (UCR)
- 2011 M.A., Department of Anthropology, UCR
- 2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
- 2002 B.A., Department of Anthropology, minor in Geography/Environmental Studies, UCCS

SUMMARY OF QUALIFICATIONS

Dr. Gust is a Registered Professional Archaeologist (RPA) with over 11 years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Dr. Gust has managed a variety of projects at Cogstone in the water, development, residential, transportation, telecommunications, and public works sectors. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

- University of California Natural Reserve System San Joaquin Marsh Reserve Water Conveyance and Drainage Improvement Project, City of Irvine, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed long-term water management improvements and habitat value of the Marsh Reserve. Services included pedestrian survey, records searches, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. Due to the proximity of the project to the San Diego Creek, the project required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE) and Section 106 National Historic Preservation Act (NHPA) compliance. University of California acted as the lead California Environmental Quality Act (CEQA) agency and USACE acted as lead agency under the National Environmental Protection Act. Sub to Moffat & Nichol. Principal Investigator for Archaeology. 2020-2021
- **Dogwood Road Project, City of El Centro, Imperial County, CA.** Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture Part 70-B RD Funding assisted housing on a 2.2-acre parcel. Cogstone conducted a record search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of NHPA and CEQA. The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. Principal Investigator for Archaeology. 2019-2020
- Jackson St HUD 58 EA Project, City of Riverside, Riverside County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Housing and Urban Development assisted housing on a 3.58-acre parcel. This assessment provided environmental documentation as required by Section 106 of NHPA. The City of Riverside was the lead agency. Cogstone conducted a records search, a Sacred Lands File Search, a pedestrian survey, and produced a report. Sub to Partner Science & Engineering. Principal Investigator for Archaeology and Report Author. 2019
- **Corona Affordable Housing Monitoring Project, City of Corona, Riverside County, CA.** Cogstone conducted cultural and paleontological resources monitoring, analyzed recovered artifacts, and prepared a monitoring compliance report during grading for the development of affordable multi-family apartment buildings. Conducted lab work and artifact analysis. Sub to C&C Development. Archaeology Supervisor and Report Author. 2018-2019



- 2013 M.S., Biology with a paleontology emphasis, California State University, San Bernardino
- 2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles

TRAINING AND CERTIFICATIONS

Trained and certified in geomorphology techniques, National Park Service, National Center for Preservation Technology and Training

SUMMARY OF QUALIFICATIONS

Ms. Scott has 28 years of experience in California as a paleontologist and sedimentary geologist. She has worked extensively in the field surveying, monitoring, and salvaging fossils on hundreds of projects. In addition, she has special skills in jacketing large fossils, fossil preparation (cleaning and stabilization) and in the preparation of stratigraphic sections and other documentation for fossil localities. She frequently authors paleontological assessments, paleontological mitigation plans, and monitoring compliance reports to all agency requirements. Ms. Scott authors and conducts crew sensitivity training, serves as company safety officer, and has authored both the company safety and paleontology manuals.

- Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, Worker Environmental Awareness Program training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). Principal Investigator for Paleontology. 2014-ongoing
- **Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA.** Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the Native American Heritage Commission, and an intensive-pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. Principal Investigator for Paleontology. 2019-2020
- **Corona Affordable Housing Monitoring Project, City of Corona, Riverside County, CA.** Cogstone conducted cultural and paleontological resources monitoring, analyzed recovered artifacts, and prepared a monitoring compliance report during grading for the development of affordable multi-family apartment buildings. Conducted lab work and artifact analysis. Sub to C&C Development. Principal Investigator for Paleontology. 2018-2019
- **Fire Station 172 Project, Rancho Cucamonga Fire Protection District, San Bernardino County, CA.** Cogstone determined the potential effects of paleontological, archaeological, and historical resources on the proposed project. The project involved relocation of the Fire Station from 9612 San Bernardino Road to 8870 San Bernardino Road. Services included the management of record searches, a Sacred Lands File search, a pedestrian survey, and completion the cultural resources assessment report. Sub to Michael Baker International. Principal Investigator for Paleontology. 2018
- San Bernardino Countywide On-Call Services, San Bernardino, CA. As prime contractor, Cogstone provided cultural, historical, and paleontological resource services for short term projects. Task services included cultural resources assessments and monitoring in compliance with CEQA, NEPA, Section 106 of the National Historic Preservation Act, and County regulations. Short-term projects included Pioneertown and other roads, Bear Springs, Aldorf Road, Elder Creek, NTH Bridges, Marshall Boulevard, Cajon Creek, Dola Bridge, Lanzit Ditch, and Luna Road. Principal Investigator for Paleontology. 2016-2017



2002 B.A., Cultural Anthropology, University of California, Santa Barbara

TRAINING AND CERTIFICATIONS

HAZWOPER Certified - Certified American Red Cross CPR; Certified American Red Cross Standard First Aid Applied Archaeology of Southern California, USDA Forest Service, San Bernardino National Forest Railroad Security Certified

SUMMARY OF QUALIFICATIONS

Ms. Duarte is a paleontologist and archaeologist with over 19 years of experience in paleontological and archaeological monitoring, surveying, and excavation in southern California. Ms. Duarte has experience with Native American consultation as required by Section 106 of the National Historic Preservation Act and under Senate Bill 18 for the protection and management of cultural resources. Beginning in 2006, Ms. Duarte worked for the U.S. Forest Service in the Biology, Timber, and Geology Department as an archaeologist, including serving as a trained wild-land firefighter to preserve archaeological sites from forest fires. Additional skills include paleontological identification, fossil preparation, artifact identification and preparation, and final report preparation.

- Santiago Canyon Estates Fuel Mod Project, unincorporated Orange County, CA. Cogstone conducted a cultural resources assessment to determine the potential for surface cultural resources for compliance with Orange County Fire Authority's Precise Fuel Modification Plan for zones of the Santiago Canyon Estates Community. Services included a cultural resources records search, Sacred Lands File search from the Native American Heritage Commission and conducted a reconnaissance survey. Sub to Fire Safe Council East Orange County Canyons. Archaeologist/Co-Author. 2020
- Newport Village Project, City of Newport Beach, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during proposed construction of 14 residential condominium units, 108 apartment units, and 121,370 square feet of mixed-use development. The project would also have publicly accessible waterfront promenade with 844 parking spaces in surface-level and subterranean parking. Services included records searches, pedestrian survey, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. The City of Newport Beach acted as the lead agency under the California Environmental Quality Act. Sub to Cox, Castle & Nicholson LLP. Archaeologist. 2019-2020
- Prologis Vermont Avenue and Redondo Beach Industrial Project, City of Los Angeles, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during proposed construction of an industrial center, 223 automobile parking spaces, 32 bicycle parking spaces, 36 high truck loading positions, and parking stalls for truck trailers. Services included records searches, pedestrian survey, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. The City of Los Angeles acted as the lead agency under the California Environmental Quality Act. Sub to PlaceWorks. Archaeologist. 2019-2020
- **Cannon Serrano Intersection Widening Project, City of Orange, Orange County, CA.** Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during proposed road improvements. Services included records searches, pedestrian survey, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. The City of Orange acted as the lead agency under the California Environmental Quality Act. Sub to Michael Baker. Archaeologist. 2019-2020



2014 M.S., Geology, California State University, Fullerton
2010 B.S., Geology, California State University, Fullerton

SUMMARY OF QUALIFICATIONS

Ms. Vreeland is a Paleontologist with over 12 years of experience in field paleontology. Her field and laboratory experience includes fieldwork and research projects throughout California and Nevada, as well as conducting fieldwork and surficial geologic mapping in Montana. Ms. Vreeland has expertise in invertebrate paleontology and paleoecology. She is a member of the Geological Society of America, the Paleontological Society, the Society for Sedimentary Geology, and the Association for Women in Geoscience.

- State Route 60 Truck Lanes Project, RCTC, Caltrans District 8, City of Banning, Riverside County, CA. RCTC in cooperation with Caltrans proposed to construct an eastbound truck-climbing lane and westbound truck-descending lane along with inside and outside standard shoulders in both directions. The total length of the project is 4.51 miles. A combined Paleontological Identification Report and Paleontological Evaluation Report found a high likelihood for this project to impact paleontological resources. Mitigation measures included a Paleontological Mitigation Plan which included requiring a paleontological Worker Environmental Awareness Program training, signed repository agreement with the San Bernardino County Museum, monitoring by a principal paleontologist, and defined standard field and laboratory methods. Cogstone is providing paleontological monitoring. At the end of construction, Cogstone will prepare a Paleontological Monitoring Report. Caltrans is the lead agency under the National Historic Preservation Act and the California Environmental Quality Act. Sub to ECORP. Supervisor. 2020-ongoing
- University of California Natural Reserve System San Joaquin Marsh Reserve Water Conveyance and Drainage Improvement Project, City of Irvine, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed long-term water management improvements and habitat value of the Marsh Reserve. Services included pedestrian survey, records searches, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. Due to the proximity of the project to the San Diego Creek, the project required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE) and Section 106 National Historic Preservation Act compliance. University of California acted as the lead California Environmental Quality Act agency and USACE acted as lead agency under the National Environmental Protection Act. Sub to Moffat & Nichol. Paleontology Supervisor. 2020-2021
- Los Angeles World Airports (LAWA) United Airlines East Maintenance Hangar and Ground Support Equipment Project, LAX, Los Angeles County, CA. Cogstone conducted cultural and paleontological monitoring during the proposed consolidation and modernization of existing facilities. The project intended to redevelop an approximately 35-acre site. Planned vertical impacts were up to 6 feet deep for footings, at least 10.5 feet for stormwater detention, and 50 to 70 feet deep for auguring. Upon completion of monitoring, Cogstone prepared a Cultural and Paleontological Resources Monitoring Compliance Report. The City of Los Angeles acted as lead agency for the project. Sub to CDM Smith. Paleontology Supervisor. 2020-2021
- Jack Ranch San Luis Obispo Agricultural Cluster Project, City of San Luis Obispo, San Luis Obispo County, CA. Cogstone prepared a cultural and paleontological assessment to propose effective mitigation of potential adverse impacts to paleontological resources resulting from a proposed subdivision of a 299-acre property into 13 residential lots as well as a Conditional Use Permit to allow for a Major Agricultural Cluster project. Cogstone provided archaeological and paleontological monitoring and submitted a Cultural and Paleontological Resources Monitoring Compliance Report upon completion. Sub to Kirk Consulting. Paleontology Supervisor. 2020-2021



LOGAN FREEBERG GIS Supervisor

EDUCATION

- 2018 Geographic Information Systems (GIS) Certificate, California State University, Fullerton
- 2003 B.A., Anthropology, University of California, Santa Barbara

SUMMARY OF QUALIFICATIONS

Mr. Freeberg has over 20 years of experience in cultural resource management and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

- New Cuyama Dump Sites 1, 2, and 3, BLM Bakersfield Office, Santa Barbara County, CA. The Project involved identifying archaeological and historical resources present within three illegal dump sites on BLM land. This study included an assessment of the historic potential of dump refuse and National Register of Historic Places eligibility recommendations for debris demonstrating affirmative evidence for an age of greater than 45 years. A Class III Cultural Resources survey was conducted and included an intensive-level pedestrian survey of the Area of Potential Effect and a total of three historic trash scatters were identified during the survey and a total of four historic isolates were identified. These resources were recorded on Department of Parks and Recreation 523 (DPR 523) forms. No archaeological sites or isolates were identified. No artifacts were collected. The deliverables were accepted by the BLM without revisions. Archaeologist and GIS Supervisor. 2020-2021
- University of California Natural Reserve System San Joaquin Marsh Reserve Water Conveyance and Drainage Improvement Project, City of Irvine, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed long-term water management improvements and habitat value of the Marsh Reserve. Services included pedestrian survey, records searches, Sacred Lands File search from the Native American Heritage Commission, background research, and reporting. Due to the proximity of the project to the San Diego Creek, the project required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE) and Section 106 National Historic Preservation Act compliance. University of California acted as the lead California Environmental Quality Act agency and USACE acted as lead agency under the National Environmental Protection Act. Sub to Moffat & Nichol. GIS Supervisor. 2020-2021
- **Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA.** Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the Native American Heritage Commission, and an intensive-pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. GIS Supervisor. 2019-2020
- **Dogwood Road Project, City of El Centro, Imperial County, CA.** Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture Part 70-B RD Funding assisted housing on a 2.2-acre parcel. Cogstone conducted a records search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act and the California Environmental Quality Act. The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. GIS Supervisor. 2019-2020

APPENDIX B. PALEONTOLOGICAL RECORD SEARCH

APPENDIX C. CULTURAL RESOURCES WITHIN ONE HALF MILE OF PROJECT AREA

| Primary No. (P- 33-) | Trinomial No. (CA- RIV-) | Resource Type | Resource Description | Year Recorded | Distance (miles) From Project Area | NRHP/CRHR Status |
|----------------------------|--------------------------------|-------------------------------------|---|--|--|--|
| 009120 | | Historic Built Environment | Single family residence. 899 W. Hays. Vernacular architectural style. 1925 | 1983 | 0.25 – 0.5 | Historically significant by local government |
| 009121 | | Historic Built Environment | Single family residence. 1015 W. Hays. Vernacular/Pueblo Revival architectural style. 1925 | 1983 | 0.25 - 0.5 | Historically significant by local government |
| 009122 | | Historic Built Environment | Single family residence. 1067 W. Hays. Vernacular architectural style. 1925 | 1983 | 0.25 – 0.5 | NR/CR - Recommended Ineligible |
| 009150 | | Historic Built Environment | Single family residence. 1222 W. Lincoln. Vernacular architectural style. 1925 | 1983 | 0-0.25 | Historically significant by local government |
| 009158 | | Historic Built Environment | Single family residence. 933 ½ W. Ramsey. Bungalow architectural style. 1915 | 1983 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 009159 | | Historic Built Environment | Single family residence. 1025 W. Ramsey. Vernacular/Bungalo w architectural style. 1915 | 1983 | 0-0.25 | NR/CR - Recommended Ineligible |
| 009161 | | Historic Built Environment | Single family residence. 1231 W. Ramsey. Bungalow architectural style. 1920 | 1983 | 0-0.25 | Historically significant by local government |
| 009498 | 006381 | Historic Archaeologic al Site | Segment of Union Pacific Railroad tracks. | 1966, 2003, 2005, 2009, 2012, 2015, 2016, 2017 | 0-0.25 | NR/CR - Recommended Ineligible |

Table C-1. Previously recorded cultural resources within a half mile radius of the Project Area

| Primary No. (P- 33-) | Trinomial No. (CA- RIV-) | Resource Type | Resource Description | Year Recorded | Distance (miles) From Project Area | NRHP/CRHR Status |
|----------------------------|--------------------------------|-------------------------------------|--|------------------|--|--------------------------------------|
| 014367 | 007816 | Historic Archaeologic al Site | Site consists of two foundations, brick structures, a concrete trough and a concrete octagonal pad. | 2004, 2015 | 0.25 - 0.5 | Unevaluated |
| 015809 | | Historic Built Environment | Single family residence. 1380 W. Lincoln. California Ranch architectural style. 1950 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015810 | | Historic Built Environment | Single family residence. 1430 W. Lincoln. California Ranch architectural style. 1950 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015811 | | Historic Built Environment | Single family residence. 1476 W. Lincoln. Unknown architectural style. 1947 | 2006 | 0 - 0.25 | NR/CR - Recommended Ineligible |
| 015812 | | Historic Built Environment | Single family residence. 1476 W. Lincoln. California Ranch architectural style. 1950 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015813 | | Historic Built Environment | Single family residence. 1617 W. Lincoln. Spanish Eclectic architectural style. 1946 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015814 | | Historic Built Environment | Single family residence. 1661 W. Lincoln. Vernacular architectural style. 1947 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015815 | | Historic Built Environment | Single family residence. 1692 W. Lincoln. California Ranch architectural style. 1959 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015816 | | Historic Built Environment | Single family residence. 1706 W. Lincoln. California Ranch architectural style. 1953 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |

| Primary No. (P- 33-) | Trinomial No. (CA- RIV-) | Resource Type | Resource Description | Year Recorded | Distance (miles) From Project Area | NRHP/CRHR Status |
|----------------------------|--------------------------------|-------------------------------|---|------------------|--|--------------------------------------|
| 015817 | | Historic Built Environment | Single family residence. 1722 W. Lincoln. California Ranch architectural style. 1960 | 2006 | 0-0.25 | NR/CR - Recommended Ineligible |
| 015818 | | Historic Built Environment | Single family residence. 2005 W. Lincoln. California Ranch architectural style. 1956 | 2006 | 0.25 – 0.5 | NR/CR - Recommended Ineligible |
| 015819 | | Historic Built Environment | Single family residence. 2008 W. Lincoln. California Ranch architectural style. 1959 | 2006 | 0.25 – 0.5 | NR/CR - Recommended Ineligible |
| 015820 | | Historic Built Environment | Single family residence. 2025 W. Lincoln. Craftsman Bungalow architectural style. 1921 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015821 | | Historic Built Environment | Single family residence. 2028 W. Lincoln. California Ranch architectural style. 1959 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015822 | | Historic Built Environment | Single family residence. 2044 W. Lincoln. California Ranch architectural style. 1961 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015823 | | Historic Built Environment | Single family residence. 2049 W. Lincoln. California Ranch architectural style. 1957 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015824 | | Historic Built Environment | Single family residence. 2071 W. Lincoln. California Ranch architectural style. 1950 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015825 | | Historic Built Environment | Single family residence. 2080 W. Lincoln. California Ranch architectural style. 1961 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |

| Primary No. (P- 33-) | Trinomial No. (CA- RIV-) | Resource Type | Resource Description | Year Recorded | Distance (miles) From Project Area | NRHP/CRHR Status |
|----------------------------|--------------------------------|-------------------------------------|---|------------------|--|--------------------------------------|
| 015826 | | Historic Built Environment | Single family residence. 2102 W. Lincoln. California Ranch architectural style. 1961 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015827 | | Historic Built Environment | Single family residence. 2120 W. Lincoln. California Ranch architectural style. 1961 | 2006 | 0.25 – 0.5 | NR/CR - Recommended Ineligible |
| 015828 | | Historic Built Environment | Single family residence. 2131 W. Lincoln. California Ranch architectural style. 1947 | 2006 | 0.25 – 0.5 | NR/CR - Recommended Ineligible |
| 015829 | | Historic Built Environment | Single family residence. 2148 W. Lincoln. California Ranch architectural style. 1960 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015830 | | Historic Built Environment | Single family residence. 2148 W. Lincoln. California Ranch architectural style. 1961 | 2006 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015831 | | Historic Built Environment | Single family residence. 2148 W. Lincoln. California Ranch architectural style. 1961 | 2006, 2009 | 0.25 - 0.5 | NR/CR - Recommended Ineligible |
| 015849 | 008229 | Historic Archaeologic al Site | Remnants of historic residence dating to pre-1940's. Site consisting of a concrete structure pad, fence line and historic trash scatter. | 2007 | 0.25 – 0.5 | Not Evaluated |
| 025807 | | Historic Archaeologic al Site | Deposit of structural concrete and masonry rubble containing rebar. | 2013 | 0.25 - 0.5 | Not Evaluated |

APPENDIX D. HISTORIC CONSULTATION





April 13, 2023

San Gorgonio Pass Historical Society P.O. Box 331 Beaumont, CA 92223

RE: Cultural Resources Assessment for the Brown Strauss Industrial Project, City of Banning, Riverside County, California.

To Whom It May Concern:

As a sub-consultant to Placeworks, Cogstone Resource Management, Inc. (Cogstone) is conducting a cultural resources assessment for the Brown Strauss Industrial Project (Project) located on 14.92 acres within Assessor Parcel Numbers (APNs) 540-180-020, -022 and -026 located at 1219 and 1431 West Lincoln Street in the City of Banning, Riverside County, California.

The Project involves the development of 14.92 gross acres of vacant land to construct a steel manufacturing and distribution facility. The total development proposal includes a 45,000 square foot (SF) warehouse, a 3,000 SF office, two 500 SF enclosed saw sheds, and an outdoor storage yard. The Project entitlements will require a General Plan amendment, zone change, and parcel merger.

We are contacting you because we would like to invite members of the San Gorgonio Pass Historical Society to provide input regarding the redevelopment of the Project area. We appreciate any information regarding the history of the Project area that you may have as well as any comments, issues, and/or concerns relating to the history of the Project area. Please contact me at slopez@cogstone.com or at (714) 974-8300. Thank you for your attention to this matter.

Sincerely,

Sh mmon Jopez

Shannon Lopez, M.A. Architectural Historian (714) 974-8300 x.108 slopez@cogstone.com

1518 West Taft Avenue Orange, CA 92865 Office (714) 974-8300 Branch Offices San Diego – Riverside – Morro Bay – Sacramento cogstone.com Toll free (888) 333-3212

Federal Certifications EDWOSB , SDB State Certifications DBE, WBE, UDBE



Figure 1. Project Vicinity Map

cogstone.com



Figure 2. Project Location Map

cogstone.com



Figure 3. Project Aerial Map

mogstone.com

APPENDIX E. SACRED LANDS FILE SEARCH



Chairperson Laura Miranda Luiseño

Vice Charperson Reginald Pagaling Chumash

SECRETARY Sara Dutschke Miwok

Commissioner Isaac Bojorquez Chlone-Costanoan

Сомміззіонея Buffy McQuillen Yokayo Porno, Yuki, Nomlaki

Соммізіонег **Wayne Nelson** Luiseño

Commissioner Stanley Rodriguez Kumeyaray

Commissioner [Vacant]

COMMISSIONER [Vacant]

Executive Secretary Raymond C. Hitchcock Miwok/Nisenan

NAHC HEADQUARTERS 1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov STATE OF CALIFORNIA

Grivin Newsorn, Governor

NATIVE AMERICAN HERITAGE COMMISSION

December 9, 2022

Cogstone Resource Management

Via Email to: cogstoneconsult@cogstone.com

Re: Brown Strauss Industrial Project, Riverside County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate trible. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <u>Andrew.Green@nahc.ca.gov</u>.

Sincerely,

ndrew Green

Andrew Green Cultural Resources Analyst

Attachment

Page 1 of 1

Native American Heritage Commission Native American Contact List Riverside County 12/9/2022

Agua Caliente Band of Cahuilla Indians Reid Milanovich, Chairperson Los Coyotes Band of Cahuilla and Cupeño Indians Ray Chapparosa, Chairperson

Agua Caliente Band of Cahuilla Indians Patricia Garcia-Plotkin, Director Morongo Band of Mission Indians Robert Martin, Chairperson

Augustine Band of Cahuilla Mission Indians Amanda Vance, Chairperson Morongo Band of Mission Indians Ann Brierty, THPO

Cabazon Band of Mission Indians Doug Welmas, Chairperson Quechan Tribe of the Fort Yuma Reservation Manfred Scott, Acting Chairman Kw'ts'an Cultural Committee

Cahuilla Band of Indians Daniel Salgado, Chairperson Quechan Tribe of the Fort Yuma Reservation Jill McCormick, Historic Preservation Officer

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 Brown Strauss Industrial Project, Riverside County.

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Native American Heritage Commission Native American Contact List Riverside County 12/9/2022

Ramona Band of Cahuilla Joseph Hamilton, Chairperson Soboba Band of Luiseno Indians Isaiah Vivanco, Chairperson

360.000 - 5600.

Ramona Band of Cahuilla John Gomez, Environmental Coordinator

Soboba Band of Luiseno Indians Joseph Ontiveros, Cultural Resource Department

San Manuel Band of Mission Indians Jessica Mauck, Director of Cultural Resources

Torres-Martinez Desert Cahuilla Indians Cultural Committee,

Santa Rosa Band of Cahuilla Indians Lovina Redner, Tribal Chair

Serrano Nation of Mission Indians Mark Cochrane, Co-Chairperson

Serrano Nation of Mission Indians Wayne Walker, Co-Chairperson

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 Brown Strauss Industrial Project, Riverside County.

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APPENDIX F. PALEONTOLOGICAL SENSITIVITY RANKING CRITERIA

PFYC Description Summary (BLM 2016)

Very Low. The occurrence of significant fossils is non-existent or extremely rare. Includes igneous (excluding air-fall and reworked volcanic ash units), metamorphic, or Precambrian rocks. Assessment or mitigation of paleontological resources is usually unnecessary except in very rare or isolated circumstances that result in the unanticipated presence of fossils.

Low. Sedimentary geologic units that are unlikely to contain vertebrate or scientifically significant nonvertebrate fossils. Includes rock units less than 10,000 years old and sediments with significant physical and chemical changes (e.g., diagenetic alteration) which decrease the potential for fossil preservation. Assessment or mitigation of paleontological resources is not likely to be necessary.

Moderate. Units are known to contain vertebrate or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and/or of low abundance. Common invertebrate or plant fossils may be found, and opportunities may exist for casual collecting. Paleontological mitigation strategies will be based on the nature of the proposed activity.

Management considerations cover a broad range of options that may include record searches, predisturbance surveys, monitoring, mitigation, or avoidance. Surface-disturbing activities may require assessment by a qualified paleontologist to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.

High. Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrates or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability.

Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.

Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate or scientifically significant invertebrate or plant fossils. Vertebrate fossils or scientifically significant invertebrate fossils are known or can reasonably be expected to occur in the impacted area. Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities.

Paleontological mitigation may be necessary before or during surface disturbing activities. The area should be assessed prior to land tenure adjustments. Pre-work surveys are usually needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.

Unknown. An assignment of "Unknown" may indicate the unit or area is poorly studied and field studies are needed to verify the presence or absence of paleontological resources. The unit may exhibit features or preservational conditions that suggest significant fossils could be present, but little information about the actual unit or area is known.

Literature searches or consultation with professional colleagues may allow an unknown unit to be provisionally assigned to another Class, but the geological unit should be formally assigned to a Class after adequate survey and research is performed to make an informed determination.

Water or Ice. Typically used only for areas which have been covered thus preventing an examination of the underlying geology.