CULTURAL RESOURCES TECHNICAL REPORT FOR RALEY BOULEVARD AND DIESEL DRIVE DEVELOPMENT PROJECT, SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA

Prepared for

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On behalf of

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Archaeological and other cultural resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites that should not be disclosed to the general public or unauthorized persons.

Information regarding the location, character, or ownership of a cultural resource is exempt from the Freedom of Information Act pursuant to 16 USC 470w-3 (National Historic Preservation Act) and 16 USC Section 470(h) (Archaeological Resources Protections Act).
EXECUTIVE SUMMARY

Purpose and Scope: Buzz Oates Construction, Inc. retained SWCA Environmental Consultants (SWCA) to conduct an archaeological resources study in support of the proposed Raley Boulevard and Diesel Drive Development Project (project) in Sacramento, California. Buzz Oates Construction, Inc. (project applicant), proposes to construct two buildings for industrial or commercial use. The project comprises three parcels that collectively measure 4.95 acres (project area). The following study was conducted to analyze the potential impacts this project may have on cultural resources located in the project area pursuant to the California Environmental Quality Act (CEQA), including relevant portions of Public Resources Code (PRC) Section 5024.1, 14 California Code of Regulations 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1. The City of Sacramento Community Development Department is the CEQA lead agency for the project. The following report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands Files (SLF) search, archival research, and pedestrian survey used to assess the potential for impacts to archaeological resources.

Dates of Investigation: A CHRIS records search for the project area plus a 0.5-mile radius was completed on March 7, 2022, by staff at the North Central Information Center (NCIC), located at California State University, Sacramento. SWCA sent an email with a map depicting the project area to the Native American Heritage Commission (NAHC) on February 28, 2022, requesting a review of their Sacred Lands File (SLF) for any Native American cultural resources that have the potential to be affected by the project. An archaeological survey was conducted by SWCA on March 1, 2022, and covered the entire 4.95-acre project area.

Results: The CHRIS records search indicated seven cultural resources studies were completed within 0.5-mile radius of the project area; none of these studies were conducted within the project area. No previously recorded cultural resources were identified in the project area. The NAHC responded to SWCA’s request on March 29, 2022, SWCA sent outreach letters to all provided Native American contacts via email on April 6, 2022, and via the U.S. Postal Service (USPS) on April 7, 2022. This report will be updated as additional responses are received. Archaeological survey included 4.95 acres of pedestrian survey. No archaeological resources were identified during the survey.

Supplementary archival research indicates the vicinity of the project area has experienced significant development since the late 1800s. The project area is regularly disked for weed abatement, which would have disturbed, displaced, or otherwise destroyed any archaeological components that may have once existed on the surface. A review of ethnographic literature confirmed that the project area is within the ancestral territory of the Nisenan and that significant villages once existed in the region near the Sacramento and American Rivers. No evidence was identified in the project area to suggest that there is an increased likelihood of buried archaeological resources associated with Native Americans. Therefore, SWCA considers the likelihood of buried archaeological resources within the project area to be low.

Conclusion: The project requires excavation and removal of the underlying alluvial sediments to depths ranging between 2 to 5 feet below the current grade. While the likelihood of buried archaeological resources within the project area is considered low, if present, such resources have the potential to be significant under CEQA. The proposed project would adhere to applicable regulatory compliance measures intended to reduce and avoid creating significant impacts to archaeological resources in the event of a discovery during grading, excavation, or other ground-disturbing activities. With implementation of conditions to comply with regulatory compliance measures related to the inadvertent discovery of archaeological resources and human remains, SWCA finds that the proposed project will have less-than-significant impact to archaeological resources.
Disposition of Data: This report will be on file with the project applicant, City of Sacramento Community Development Department, NCIC, and SWCA’s Sacramento Office.
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INTRODUCTION

Buzz Oates Construction, Inc. retained SWCA to conduct an archaeological resources study in support of the proposed project in Sacramento, California. The project applicant proposes to construct two buildings for industrial or commercial use. The project area collectively measures 4.95 acres. The following study was conducted to analyze any potential impacts this project may have on cultural resources located in the project area, for compliance with the California Environmental Quality Act (CEQA). The City of Sacramento Community Development Department is the CEQA lead agency for the project. This report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search, archival research, and pedestrian survey used to assess the potential for impacts to archaeological resources.

This report was prepared and managed by SWCA Cultural Resource Project Manager Deanna Keegan, M.A., RPA. Sections of this report were prepared by Reid Donovan. Cultural Resources Team Lead Joshua Peabody, M.S, RPA, served as Principal Investigator. Ms. Keegan, Mr. Donovan, and Mr. Peabody meet and exceed the requirements of the Secretary of the Interior (SOI) Professional Qualification Standards (PQS) in Archaeology (National Park Service [NPS] 1983). Mr. Peabody meets the requirements of the SOIPQS for Principal Investigator (NPS 1983). Copies of the report will be on file with the project applicant, City Planning Division, North Central Information Center (NCIC), and SWCA’s Sacramento Office.

Project Location

The project area consists of three vacant parcels, totaling 4.95 acres, located southeast of the Raley Boulevard and Diesel Drive intersection in the City of Sacramento (Assessor’s Parcel Numbers [APNs] 238-0220-041, -042, and -043). The location is plotted in Township 9 North, Range 5 East, Section 00 as depicted on the U.S. Geological Survey (USGS) Rio Linda, California, 7.5-minute topographic quadrangle. The L-shaped site is bordered by Diesel Drive to the north; a Sacramento Municipal Utility District (SMUD) easement, an isolated parcel, and a private parcel to the east; a private parcel to the southwest; Bell Avenue to the south; and Raley Boulevard to the west. The location of the project area within the larger region is depicted on Figure 1, and the location of the project area within the northeastern portion of Sacramento as depicted on Figure 2. The site is approximately 6 miles northeast of downtown Sacramento.

The project area is in a built-up urban area and is surrounded by a mix of industrial, commercial, and residential uses to the north, east, south, and west. Vacant properties, scattered residences, and light industrial uses are located to the north across Diesel Drive. A 20- to 25-foot-wide SMUD easement is located along a portion of the site’s east boundary leading to an isolated parcel; light industrial uses lie to the east of the SMUD easement. Immediately south and west of the project area is the Bell Gas Pacific Pride gasoline station and rest stop, located at the northeast corner of the Raley Boulevard and Bell Avenue intersection. An ARCO gas station and vacant properties zoned for light industrial uses are located across Raley Boulevard to the west. There are commercial, residential, and manufacturing, research, and development uses to the south across Bell Avenue. Bell Avenue Elementary School and Robla Pre-School are located approximately 1,750 feet to the southeast on Bell Avenue. The Sacramento McClellan Airport is approximately 1 mile to the northwest.
Project Description

Proposed Building Characteristics

The project would construct two 42-foot-tall warehouse buildings, as well as various other site improvements related to internal vehicle circulation, stormwater management, and landscaping, within the 215,515-square-foot project area. Development of the project area with two warehouse structures would total approximately 67,500 gross square feet. Each warehouse building would be one-story tall. A copy of the proposed site plan is included in Appendix A.

Building A, the building proposed for the northern portion of the site adjacent to Diesel Drive, would be approximately 41,466 square feet in size and contain a depressed loading dock on the southern boundary of the building. Building A would also contain 287 square feet for future office uses, with a possibility of expansion up to 4,305 square feet of office uses. Building A would have a 27-foot setback from Diesel Drive and an 81.5-foot setback from Raley Boulevard.

Building B, the building proposed for the southern portion of the site adjacent to Bell Avenue, would be approximately 25,280 square feet and contain a depressed loading dock on the northern face of the building. Building B would also include 190 square feet for future office uses, with the possibility of expansion up to 2,835 square feet. Building B would have a 27-foot setback from Bell Avenue.

Site Access, Parking, and Vehicle Circulation

Regional access to the project area would be provided by Interstate 80 (I-80), which is located approximately 0.4 mile south of the project area. Primary site access to Building A on the northern portion of the site would be provided from a driveway off Diesel Drive and a driveway off Raley Boulevard. Each driveway would be 45 feet wide and provide access to the loading dock and parking areas. Site access to Building B on the southern portion of the site would be provided from Bell Avenue by a 45-foot driveway leading to the loading dock and parking area. Implementation of the project would include roadway and sidewalk frontage improvements along Diesel Drive, Raley Boulevard, and Bell Avenue.

The project would include a total of 57 surface parking spaces, consisting of 49 standard spaces, two Americans with Disabilities Act (ADA) van accessible spaces, two ADA standard accessible spaces, and four clean air vehicle spaces. Parking for Building A would consist of 35 surface spaces situated along the eastern and western portions of the building. There would be bicycle lockers for four bicycles and one rack for two bicycles. Parking for Building B would consist of 22 surface spaces situated along the western portion of the building. There would be bicycle lockers for two bicycles and one rack for two bicycles.

Utilities

A 10-inch-diameter water line exists within the Diesel Drive right-of-way (ROW) and two water lines ranging in size from 12 to 18 inches exist within the Bell Avenue ROW. Implementation of the proposed project would include new 6-inch wastewater pipes to connect the proposed buildings to the existing wastewater infrastructure within the Diesel Drive and Bell Avenue ROWs. In addition, 6-inch and 8-inch fire service water lines would be routed within the proposed drive aisles and connect to four proposed hydrants throughout the project area.
Stormwater generated by the impervious surfaces associated with the proposed project would be directed
to two proposed stormwater bioretention basins at the northwest corner of Building A and to the east of
Building A. Following retention, stormwater would be directed to the City’s existing stormwater drain
line located within the Diesel Avenue ROW. In addition, the project would install a stormwater pump lift
station along the eastern border of the project area within the SMUD easement.

**Construction**

The project’s construction activities are expected to start in March 2023 and occur over a period of
12 months. Construction activities for the proposed project would include grading and excavation of the
4.95-acre project area, followed by utility trenching and site preparation, building construction, paving,
and architectural coating. Project construction would include use of standard construction equipment,
including excavators, graders, tractors, loaders, and pavers.

Existing site materials would be recycled or reused, when feasible; various recycled materials would be
used in construction; and durable, long-lasting exterior finish materials would be incorporated throughout
the project.

**Area of Potential Impact**

The area of potential impact (API) is defined as that geographical space of the project area within which
the proposed project may impact, directly or indirectly, significant cultural resources. The horizontal API
includes all potential areas of ground disturbance and work areas and measures 215,515 square feet.
The vertical API includes the extent of the proposed excavation. During grading and excavation of the
project area, portions of the project area would be lowered approximately 2 to 5 feet. Construction is
anticipated to require approximately 14,177 cubic yards of cut and approximately 856 cubic yards of fill,
resulting in 13,321 cubic yards of export.
Figure 1. Vicinity map.
Figure 2. Location map.
REGULATORY SETTING

State Regulations

The California Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation, is responsible for carrying out the duties described in the California Public Resources Code (PRC) and maintaining the California Register of Historical Resources (CRHR). The state-level regulatory framework also includes CEQA, which requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historical and/or archaeological resources may be adversely affected by a proposed project. Under CEQA, a “project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment” (PRC Section 21084.1). Answering this question is a two-part process: first, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential “substantial adverse change in the significance” of the resource.

HISTORICAL RESOURCES

According to CEQA Guidelines Section 15064.5, for the purposes of CEQA, historical resources are as follows:

- A resource listed in, or formally determined eligible…for listing in the CRHR (PRC 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historic resources survey meeting the requirements of Section PRC 5024.1(g).
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the CRHR (as defined in PRC Section 5024.1, Title 14 CCR Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet the National Register of Historic Places (NRHP) criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines Section 15064.5[b]).

Substantial Adverse Change and Indirect Impacts to Historical Resources

CEQA Guidelines specify that a “substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate
surroundings such that the significance of an historical resource would be materially impaired” (Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes “those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion” or eligibility for inclusion in the NRHP, CRHR, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the “direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects.”

The following guides and requirements are of particular relevance to this study’s analysis of indirect impacts to historical resources. Pursuant to CEQA Guidelines (Section 15378), study of a project under CEQA requires consideration of “the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” CEQA Guidelines (Section 15064(d)) further define direct and indirect impacts as follows:

1. A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.

2. An indirect physical change in the environment is a physical change in the environment, which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.

3. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

ARCHAEOLOGICAL RESOURCES

In terms of archaeological resources, PRC Section 21083.2(g) defines a “unique archaeological resource” as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–[c]). CEQA notes that, if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered to be a significant effect on the environment (CEQA Guidelines Section 15064.5[c][4]).

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse
change” (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally
determined eligible for listing in the NRHP, and California Historical Landmarks numbered 770 and
higher are automatically listed in the CRHR. Other properties recognized under the California Points of
Historical Interest program, identified as significant in historical resources surveys, or designated by local
landmarks programs may be nominated for listing in the CRHR. According to PRC Section 5024.1(c), a
resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if
the State Historical Resources Commission determines that it meets one or more of the following criteria,
which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad
patterns of California’s history and cultural heritage.

- **Criterion 2:** It is associated with the lives of persons important in our past.

- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of
construction, or represents the work of an important creative individual, or possesses high artistic
values.

- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or
prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey
the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may
still be eligible for listing in the CRHR.

**Treatment of Human Remains**

The disposition of burials falls first under the general prohibition on disturbing or removing human
remains under California Health and Safety Code Section 7050.5. More specifically, remains suspected to
be Native American are treated under CEQA at CCR Section 15064.5. PRC Section 5097.98 illustrates
the process to be followed if remains are discovered. If human remains are discovered during
construction, the following procedure shall be observed:

- **Stop immediately and contact the county coroner:**
  Sacramento County Coroner
  4800 Broadway, Suite 100
  Sacramento, CA 95820
  916-874-9320

- If the remains are determined to be of Native American descent, the coroner has 24 hours to
  notify the Native American Heritage Commission (NAHC).

- The NAHC will immediately notify the person it believes to be the most likely descendant
  (MLD) of the deceased Native American.

- The MLD has 48 hours to make recommendations to the owner, or representative, for the
treatment or disposition, with proper dignity, of the human remains and grave goods.

- If the owner does not accept the MLD’s recommendations, the owner or the MLD may request
  mediation by the NAHC.
BACKGROUND

Environmental Setting

The proposed project lies in a region dotted with low natural hills in the Sacramento Valley, west of the Sierra Nevada foothills. The Sacramento Valley has broad alluvial plains dominated by annual grasslands and wetland habitats. The Sacramento River and its tributaries drain this rich agricultural valley from its northern headwaters approximately 380 miles south to the Sacramento–San Joaquin Delta. The project area is approximately 7.17 kilometers (4.45 miles) north of the American River. General lithography of the project area consists of Quaternary riverbank formation deposits (Jennings et al. 2010). Soils of the project area consist of San Joaquin silt loam, 0 to 3 percent slopes (U.S. Department of Agriculture [USDA] 2022). The parcel has an elevation of approximately 50 meters (164 feet) above mean sea level.

Historically the climate was moister and cooler than today’s Mediterranean climate (Major 1988). Today’s temperature generally ranges between 3.3 and 34 degrees Celsius (38 and 93 degrees Fahrenheit). Precipitation averages 43 centimeters (17 inches) per year and occurs primarily between November and March. This translates to hot summers and cool/cold and wet winters.

The project area is currently vacant and contains ruderal vegetation. During the prehistoric era, the project area would have been a very productive environment with a variety of water birds, small and large mammals, reptiles, amphibians, and edible plant species.

Within the Sacramento Valley, the environment has extensively been altered over the past 150 years. Major modifications include the construction of an extensive levee system to control the Sacramento and American Rivers, channelization of other waterways, and the introduction of agricultural practices and nonnative Mediterranean grasses. Before these changes, the marshy wetlands supported stands of willow (Salix sp.), cottonwood (Populus fremontii), tule (Scirpus sp.), and sycamore (Platanus racemosa) (Wallace 1978). Oak groves in the project area would have likely included blue oaks (Quercus douglasii), interior live oaks (Q. wislizeni), and valley oaks (Q. lobata). These natural communities would have provided a portion of the plant resources utilized by prehistoric populations.

Fauna in the proposed project area would have likely included a number of larger mammals, including mule deer (Odocoileus Hemionus hemionus), black-tailed deer (O. hemionus), mountain lion (Felis concolor), and black bear (Ursus americanus), whose range is now limited to the Sierran foothills and mountains. Tule elk (Cervus elaphus nannoides) and pronghorn (Antilocapra americana) were also common in the valley, but now occur in very limited areas (Jameson and Peeters 1988). Small animals such as rabbit (Sylvilagus sp.), black-tailed jackrabbit (Lepus californicus), gray squirrel (Sciurus griseus), coyote (Canis latrans), and gray fox (Urocyon cinereoargenteus) would have also been in the area.

The marshy wetlands once common in the Sacramento Valley provided a rich habitat for migratory waterfowl and other birds. Today, for example, one sees great blue heron (Ardea herodias), belted kingfisher (Ceryle alcyon), mallard duck (Anas platyrhynchos), green-winged teal (A. crecca), northern pintail (A. acuta), northern flicker woodpecker (Colaptes auratus), red-winged blackbird (Agelaius phoeniceus), black-shouldered kite (Elanus caeruleus), northern harrier (Circus cyaneus), rock dove (Columba livia), and red-tailed hawk (Buteo jamaicensis). Like other rivers in this area, the American River would have also supported a number of anadromous and freshwater fish species, including salmon (Oncorhynchus sp.), rainbow trout/steelhead (O. mykiss), and the occasional sturgeon (Acipenser transmontanus).
Cultural Setting

The following sections provide background for the cultural and historical contexts of the project area, including a synopsis of the archaeological record in the greater region, summary of available ethnographic literature and current status for tribal groups and native inhabitants of the region, and a summary of regional and local histories.

PREHISTORIC OVERVIEW

The project area is situated in what is generally described as the Sacramento Valley Region, which is one of eight arbitrary organizational divisions of the state (Moratto 1984). Occupation in the Sacramento Valley during the Prehistoric Period is estimated to have occurred as early as 12,000 years ago; however, only a few archaeological sites have been identified that predate 5,000 years ago. It is possible that Holocene alluvial deposits buried many prehistoric sites in this area. For example, Moratto (1984:214) has estimated that as much as 10 meters of sediment accumulated along the lower stretch of the Sacramento drainage system during the last 5,000–6,000 years.

Prehistoric material culture in central California (including the Sacramento Valley) after the Paleoindian Period has been categorized according to “horizons” or “patterns” that define broad technological, economic, social, and ideological elements over long periods of time and large areas. The taxonomic system historically used for central California is a tripartite classification scheme with Early, Middle, and Late Horizons. This Central California Taxonomic System (CCTS) was the result of efforts of several researchers (e.g., Beardsley 1954; Heizer 1949), and was further developed after the advent of radiocarbon dating (Fredrickson 1973, 1974; Heizer 1958; Ragir 1972).

Today, a series of generalized periods associated with regionally based “patterns” are typically used as part of the CCTS for the Sacramento-San Joaquin Delta area, San Francisco Bay area, and North Coast ranges (Bennyhoff and Fredrickson 1969; Fredrickson 1973, 1974). Smaller units of patterns are referred to as “aspects” and “phases.” Revisions of the widely accepted CCTS (Bennyhoff 1994; Fredrickson 1994a, 1994b) are found in a recent volume edited by Hughes (1994).

Fredrickson (1973, 1974) defined several regionally based patterns, of which three are specific to Central Valley prehistory and the current project area. Referred to as the Windmiller Pattern, Berkeley Pattern, and Augustine Pattern, each represents a general pattern of resource exploitation, as identified between 2500 B.C. and the beginning of Euro-American contact (A.D. 1769). These patterns are present within the following horizon sequences: Early Horizon/Windmiller Pattern, Middle Horizon/Berkeley Pattern, and Late Horizon/Augustine Pattern. Table 1 shows the hypothesized cultural periods in California, based on the CCTS classification scheme and Fredrickson (1994a).

Table 1. California Cultural Periods

<table>
<thead>
<tr>
<th>Cultural Period</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D. 1800</td>
<td></td>
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<tr>
<td>Phase 2, Late Horizon</td>
<td></td>
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<tr>
<td>A.D. 1500</td>
<td></td>
</tr>
<tr>
<td>Lower Emergent</td>
<td>The atlatl and dart are replaced by the bow and arrow; south coast maritime adaptation flowers. Well-established territorial boundaries. Distinctions in social status linked to wealth become increasingly common. Network exchanges see an influx of material between groups as regularized exchanges become more frequent.</td>
</tr>
<tr>
<td>Phase 1, Late Horizon</td>
<td></td>
</tr>
</tbody>
</table>
Cultural Period Characteristics

A.D. 1000
Upper Archaic Period
Middle Horizon
Intermediate Cultures

Sociopolitical complexity has a marked growth; shell beads, possibly indicators of both exchange and status, gain importance. Group-oriented religious organization begins to emerge; possible origins of Kuksu religious system towards the later part of period. Greater complexity of exchange systems; evidence of regular, sustained exchanges between groups; territorial boundaries not firmly established.

500 B.C.
Middle Archaic Period
Middle Horizon
Intermediate Cultures

During this interval the climate has become more benign. Mortars and pestles and inferred acorn economy introduced. Diversification of economy; sedentism begins to develop, accompanied by population growth and expansion. Technological and environmental factors provide dominant themes. Little impact is demonstrated in exchange or in social relations.

3000 B.C.
Lower Archaic Period
Early Horizon
Early San Francisco Bay
Early Milling Stone Cultures

Climatic changes cause ancient lakes to dry up; an abundance of milling stones appear in the archaeological record; priority subsistence sees a shift from hunting to a plant-based food emphasis. Manufacturing of artifacts using local material is dominant; network exchange reflects the patterns of previous period. Little emphasis on wealth. The extended family continues to make up the social unit.

6000 B.C.
Upper Paleo-Indian Period
San Dieguito
Western Clovis
8000 B.C.

First demonstrated entry and spread of humans into California; lakeside sites indicate a probable hunting emphasis, but not clearly demonstrated. Evidence for a developed milling technology does not appear in the archaeological record. Exchange on a one-to-one basis, probably ad hoc. The extended family, which makes up the social unit, is not heavily dependent on exchange; procurement of new resources is acquired by changing habitat.

Early Horizon/Windmiller Pattern (2500-500 B.C.)

Clearly documented evidence for human occupation in the general area is found at sites characteristic of the Windmiller Pattern, or Early Horizon. These sites date to as early as 4,500 years ago and as late as 2,500 years ago (2500–500 B.C.). Such sites often contain manos and metates (grinding stones), as well as many mortar fragments, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984:201).

In addition to plant foods, the subsistence system included many other food resources, such as deer, elk, pronghorn, rabbits, and waterfowl. Numerous faunal remains have been documented at Windmiller Pattern sites, along with large quantities of projectile points. The presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items made of baked clay included net sinkers, pipes, discoids, and cooking “stones.” Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools have also been found in Windmiller Pattern sites. Some items were obtained by trade, including shell beads, obsidian tools, and quartz crystals.

The archaeological record during the Windmiller Period indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Mortuary practices included burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites.

MIDDLE HORIZON/BERKELEY PATTERN (500 B.C.–A.D. 500)

Over a 1,000-year period, the Windmiller Pattern began to shift to the more specialized, adaptive Berkeley Pattern, or Middle Horizon (500 B.C.–A.D. 500). A shift to a greater reliance on acorns as a dietary staple is interpreted during the Berkeley Pattern from the increase in mortars and pestles, along with a decrease in manos and metates. Mortars and pestles are better suited to crushing and grinding
acorns, while manos and metates were used primarily for grinding wild grass grains and seeds (Moratto 1984:209–210).

As demonstrated by the artifact assemblage, hunting remained an important aspect of food procurement during the Berkeley Pattern (Fredrickson 1973:125–126). The archaeological record, which consists of numerous large shell midden/mounds, also demonstrates that most Berkeley Pattern sites located near, or in the vicinity of, both fresh and salt water made intensive use of marine and estuarine resources. The artifact assemblage also includes shell beads and ornaments, as well as numerous types of bone tools. Interment continues to dominate mortuary practices, but a few cremations are also found at Berkeley Pattern sites.

Artifact assemblages and radiocarbon dating of sites from this period suggest this subsistence pattern may have developed in the San Francisco Bay region and later spread to surrounding coastal locales and into central California. Moratto (1984:207–211) suggests that this pattern is related to the expansion of Eastern Miwok populations from the San Francisco Bay area to the Sacramento Valley and Sierra foothills.

**AUGUSTINE PATTERN (A.D. 500–1769)**

The Augustine Pattern (A.D. 500–1769) is evidenced by several changes in subsistence, foraging, and land use patterns that begin to reflect the use pattern known from Historic Period Native American groups in the area. A substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn), evidenced in the archaeological record correlates directly with an increase in population growth (Moratto 1984:211–214).

Tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes Brownware, are found in some parts of the Central Valley, and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). Additional items of material culture included flanged tubular pipes, harpoons, and small Gunther barbed series projectile points. The Augustine Pattern may represent the southward expansion of Wintu populations (Moratto 1984:211–214).

**Ethnographic Overview**

The project area is located in the traditional territory of the Nisenan, who are also known as the Maidu, and lived in the southern extent of the Sacramento River and east into the foothills of the Sierra Nevada Mountains. The term Maidu stems from the Native word for “person” or “human” though it appears to include all living beings (Bibby 1994:325). The term Maidu is often used to describe three distinct Maiduan speaking peoples historically identified as Maidu (includes Northeastern Maidu or Mountain Maidu) of Plumas and Lassen counties, Kinkow (Northwestern Maidu, Concow, or Koyongkauwi) of Butte and Yuba counties, and Nisenan (Southern Maidu) of Yuba, Nevada, Placer, Sacramento, and El Dorado counties (Bibby 1994:325).
The traditional territories of the Nisenan included the drainages of the Yuba, Bear, and American Rivers, along with the lower drainage of the Feather River to the east and extending to the Cosumnes River in the south. Linguistically, they are closely related to the neighboring Konkow and Maidu languages, which together form the Maiduan Language Family (Mithun 2001:455), a subgroup of the Penutian language stock (Wilson and Towne 1978:387). Nisenan consisted of four dialects, each of which was found in geographically distinct areas of their territory, namely the Valley, Southern Hill, Central Hill, and Northern Hill. Their neighbors included the Southern Patwin to the west across the Sacramento River beyond the Yolo Basin, the Plains Miwok in the Sacramento-San Joaquin River Delta region, the Konkow to the north, and the Washoe on the east in the Sierra Nevada.

The Valley Nisenan generally established semi-permanent settlements or winter villages on low, natural rises along streams and rivers or on gentle, south-facing slopes (Wilson and Towne 1978:388). Communities were composed of a larger, central village with several smaller, outlying smaller villages. The number of houses varied from three to seven in smaller villages to 40 to 50 houses in larger villages. Houses were circular dome-shaped or conical, 10 to 15 feet in diameter, earth-covered semi-subterranean structures. Smaller brush shelters were used in the summer when more activities occurred outdoors. Structures also included large dance houses, sweat houses, and acorn granaries. Village populations ranged from a couple of families to over 100 individuals (Kroeber 1925:397). Numerous primary Nisenan villages were located along the banks of the American, Bear, Feather, and Sacramento Rivers. Two important villages were located near the project site, Sekumni and Kadema, which are located just north of the American River (Wilson and Towne 1978:388).

It appears that each community, whether a single village with satellite houses or a cluster of villages, controlled and managed the natural resources of its region. Although the position of headman carried authority, it was not direct authority, but required the support and agreement of the villagers and shaman (Wilson and Towne 1978:393). The headman position was often hereditary, though it could also be elected by a council of household heads. Among his duties to maintain the functioning of his community, the headman advised his people, called and directed special festivities, arbitrated disputes, hosted ceremonial gatherings, and called heads of family into council to discuss matters of community import. Feuds within a community might be ultimately resolved through one family moving away. Relations between communities were generally friendly and often resources were shared. But disputes over trespass into gathering and hunting areas sometimes arose. Deceased Nisenan were cremated, and their remains were buried in a designated cemetery area (Wilson and Towne 1978:392).

The fundamental economy of the Nisenan was one of subsistence hunting, fishing, and collecting plant foods in an area where abundant natural resources varied seasonally. Like most native Californians, the Nisenan relied on acorns as a staple food, which were collected during the fall and stored in granaries. Other vegetal resources, such as pine nuts, hazelnuts, buckeye nuts, fruits, berries, underground onions and tubers, and seeds, supplemented the diet. Salmon and other fish, shellfish, birds, grasshoppers and other insects, as well as large and small mammals, were also harvested or hunted, and consumed. Deer, elk, antelope, and black bears were among the large animals that were hunted by the Nisenan.

A wide variety of tools, implements, and enclosures were employed by the Nisenan to gather and collect food resources. These included the bow and arrow, traps, nets, slings, and blinds for hunting land mammals and birds, along with harpoons, hooks, and nets, and tule balsa and log canoes for catching fish. Throwing sticks were typically used to hunt rabbits and hares, and large nets and clubs were used during communal drives. Woven tools, including seed beaters, burden baskets, and carrying nets, as well as sharpened digging sticks, were used to collect a wide array of plant resources.
The Nisenan processed food resources with a variety of tools, including portable stone mortars, bedrock mortars and pestles, anvils, woven strainers and winnowers, leaching baskets and bowls, woven parching trays, wooden mortars, and knives. Unprocessed acorns were stored in large granaries. Trade was common between Nisenan groups for various resources and implements and with neighboring groups for finely made shell ornaments and money beads, steatite, and obsidian.

Spanish explorers first crossed into Nisenan territory in 1808, but there is no record of Nisenan peoples being removed from their lands to Spanish missions at this time (Wilson and Towne 1978:396). Trappers entered the Sacramento Valley in the late 1820s and began more frequent incursions into Nisenan territory. As a direct result of the introduction of foreign diseases, an estimated 75 percent of the Valley Nisenan were decimated during the great epidemic that swept the Sacramento Valley in 1833. With entire villages wiped out, Valley Nisenan survivors retreated into the hills (Cook 1955:322).

The discovery of gold in 1848, at Sutter’s Mill near Coloma on the American River, had a devastating impact on the lives of indigenous Californians in the Sacramento and San Joaquin Valleys and all along the foothills of the Sierra Nevada (Chartkoff and Chartkoff 1984:296). Coloma was in the heart of Nisenan territory. With the tens of thousands of gold seekers came the mass introduction and concentration of diseases, the loss of land and territory (including traditional hunting and gathering locales), violence, malnutrition, and starvation (Grunsky 1989). Traditional lands of the Hill Nisenan were overrun in the early 1850s, and Nisenan survivors had little choice but to live at the margins of foothill towns and work for agricultural, logging, and ranching industries (Wilson and Towne 1978:396).

Although few descendants of the Valley Nisenan were recorded in the 1960 United States Census, several Hill Nisenan families resided in El Dorado, Nevada, Placer, and Yuba Counties in the 1970s (Wilson and Towne 1978:396–397). Today, there are approximately 2,500 Maiduan people (including the Maidu of Plumas and Lassen Counties, the Konkow of Butte and Yuba Counties, and the Nisenan of El Dorado, Nevada, Placer, Sacramento, and Yuba Counties) who live primarily on the rancherias of Auburn, Berry Creek, Chico, Enterprise, Greenville, Mooretown, Shingle Springs, and Susanville, as well as on the Round Valley Reservation (White 2005).

**Historic Setting**

Post-contact history for the state of California is divided into three specific periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present).

**Spanish Period (1769–1822)**

The beginning of Spanish settlement in California, which marked the devastating disruption of the culture of indigenous Californians, occurred in the spring of 1769. Despite being sited within the territory claimed by Spain, exploration between 1529 and 1769 of Alta (upper) California was limited. During this nearly 250-year span, there were only brief visits by Spanish, Russian, and British explorers.

In 1769, Gaspar de Portolá established the first Spanish settlement in Alta California at San Diego and, with Father Junipero Serra, founded the first of 21 missions (Mission San Diego de Alcala) that would be built by the Spanish and the Franciscan Order between 1769 and 1823. Portolá continued north, reaching San Francisco Bay on October 31, 1769. Later expeditions to Alta California by Pedro Fages (1772), who was seeking a site for a mission, and Juan Bautista De Anza (1776), who was seeking a site for a presidio and mission, explored the land east of San Francisco Bay and viewed the vast plains to the east (Grunsky 1989:2–3).
In 1808, Spanish Lieutenant Gabriel Moraga led the first expedition into the Sacramento Valley and traveled northward along the Sacramento River. The expedition was scouting for new mission locations and also searching for runaway Indian neophytes from the coastal missions. They traveled south as far as the Merced River and explored parts of the American, Calaveras, Cosumnes, Feather, Mokelumne, and Stanislaus Rivers to the north. In 1817, the final Spanish expedition into the interior of Alta California was led by Luis Arguello, who traveled up the Sacramento River, past the future site of the City of Sacramento to the mouth of the Feather River, before returning to the coast (Beck and Haase 1974:18, 20; Grunsky 1989:3–4).

**Mexican Period (1822–1848)**

Mexico revolted against the Spanish crown in 1822. After the Revolution of 1822, all Spanish holdings in North America (including both Alta and Baja California) became part of the new Mexican republic. With the onset of the Mexican Period, an era of extensive land grants began, in contrast to the Spanish colonization through missions and presidios. Most of the land grants to Mexican citizens in California (*Californios*) were in the interior, granted to increase the population away from the more settled coastal areas where the Spanish had concentrated their settlements.

With the opening by Mexico of California to Americans after the 1822 revolution, the fur trappers, also known as “mountain men,” began exploring west of the Sierra Nevada Mountains. The first trapper to enter California was Jedediah Smith, whose small party trapped and explored along the Sierra Nevada in 1826. They entered the Sacramento Valley in 1827, traveling along the Cosumnes and American Rivers and camping near Wilton and the Rosemont section of modern-day Sacramento. As a result of the explorations by Smith and other trappers, maps of the Sacramento Valley were created and circulated in the 1830s (Grunsky 1989:9–11).

Between 1830 and 1833, large numbers of the indigenous population in the Sacramento Valley died from disease, likely introduced by the American trappers and/or the local Mexican population. Disease exterminated whole tribes along the American, Merced, Tuolumne, and Yuba Rivers (Cook 1955). In 1837, the Sacramento Valley was hit by a second epidemic, which further decimated indigenous Californians. The issuance of numerous land grants, accompanied by population increases, contributed to the continuing introduction of foreign diseases for which Native Americans had no immunity.

A number of land grants were issued in the Sacramento area, starting in 1833 with John Rogers Cooper, a British sea captain who married into an established *Californio* family (Grunsky 1989:14). John Sutter received the two largest land grants in the Sacramento Valley. In 1839, Sutter founded a trading and agricultural empire called *New Helvetia*, which was headquartered at Sutter’s Fort near the divergence of the Sacramento and American Rivers, in Valley Nisenan territory.

**American Period (1848–Present)**

Victory in the Mexican–American War (1846–1848) resulted in Mexico releasing its northern territories (now the states of California, Arizona, Colorado, New Mexico, and part of Utah) to the United States under the Treaty of Guadalupe Hidalgo in 1848. Even though California became a territory of the United States, the full impact of “Americanization” would not occur until the discovery of gold in 1848. The discovery of gold on the American River at Sutter’s Mill had a devastating impact on the lives of indigenous Californians in the Central Valley and all along the foothills of the Sierra Nevada (Chartkoff and Chartkoff 1984:296). The mass introduction and concentration of diseases, the loss of land and territory (including traditional hunting and gathering locales), violence, malnutrition, and starvation accompanied the tens of thousands of gold seekers (Grunsky 1989).
One year after the discovery of gold, nearly 90,000 people had journeyed to the gold fields of California, and a portion of Sutter’s Mexican land grant became the bustling Gold Rush boomtown of Sacramento. Largely as a result of the Gold Rush, California became the 31st state in 1850. By 1853, the population of the state exceeded 300,000 and in 1854, Sacramento became the state capital.

As the surface gold (i.e., placer gold) disappeared along the rivers and other waterways, mining shifted toward more industrialized methods of extraction, including hydraulic and dredge mining. Hydraulic mining was outlawed in the 1880s, although dredge mining continued at a smaller scale than during the Gold Rush in the western Sierra foothills into the 1950s. Extensive dredge tailings along the American River bear witness to this environmentally destructive mining method.

The City of Sacramento survived several early devastating floods and fires. In addition to its central location to the mining district in the foothills, it served as a river transportation hub after Sutter began a steamer service, and the City had 12 stage lines by 1853. Sacramento was also the westernmost point of the Pony Express (1860–1861) and the terminal of the first California railroad, the Sacramento Valley line, which ran 22 miles east to Folsom (Beck and Haase 1974:51, 53, 68).

With the completion of the transcontinental railroad in 1869, thousands of new settlers and immigrants poured into the state during the second half of the nineteenth century. California was fast becoming a national leader in the production of agricultural products. The vast Central Valley’s fertile soil, combined with numerous irrigation canals, promoted the growth of large amounts of fruits, vegetables, and nuts, as well as vineyards (introduced early in the Spanish and Mexican Periods), livestock (cattle and sheep), and field crops, such as hay, cotton, rice, and barley.

In the Sacramento area, land-based agriculture and livestock (sheep, beef, and dairy cattle) became the dominant industry. Primary agricultural products included rice, vegetables, and hay, as well as fruits and nuts. This agriculture-based industry promoted the growth of a large number of food processing plants in Sacramento and nearby Yolo County. By the 1940s, several military installations had located in Sacramento County near the City of Sacramento. Later, some of the leading aerospace industries in the state of California also located in this region.

**Local History**

Located to the east of Sutter’s New Helvetia were three land grants: Rancho del Paso (44,371 acres), Rio de Los Americanos (35,521 acres), and Rancho San Juan (19,983 acres). To the south were three additional land grants: Sanjon de los Moquelumnes (35,508 acres), Rancho Cosumnes (26,605 acres), and Rancho Omochumnes (18,662 acres). The current project area is located within the Rancho Del Paso next to the American River.

**RANCHO DEL PASO**

Rancho Del Paso was originally a 44,371-acre land grant given by Governor Mitcheltorena to Elijah Grimes in 1844 and was the first settlement in the Sacramento Valley. Rancho Del Paso, or “Ranch of The Pass,” was named from a road travelers used to cross the Sierra Nevada at Emigrant Gap between 1840 and 1850 (Haggin Oaks Golf Course 2014). With his partner John Sinclair, Grimes raised cattle and wheat. Elijah Grimes later died in 1848 and left his portion of the Rancho to his nephew Hiram Grimes. After Elijah’s death, Sinclair decided to sell his portion of the Rancho to Hiram Grimes. Hiram later sold the entire property to Samuel Norris in 1852 (Haggin Oaks 2014). Between Elijah’s death and the sale of the land to Norris, other descendants of the Grimes family tried to contest the last will and testament of Elijah Grimes. This continued into Norris’s ownership and involved both the U.S. Supreme Court and the State of California. The will was confirmed by the courts in 1859 (U.S. Circuit Court 1859). Due to debt
accrued from fighting land ownership in court, Norris sold the Rancho to his attorneys James Haggin and Lloyd Tevis. This resulted in a lawsuit where Norris tried to recover his land by suing the attorneys in 1890 (U.S. Supreme Court 1890). Haggin and Tevis both utilized the land as a ranch, while Haggin expanded his business ventures into horse thoroughbred breeding. By 1873 the Rancho was divided into two sections for Haggin to expand his business. In 1891 Haggin started a company called the Rancho Del Paso Land Company which he used to subdivide the property and sell about 4,000 acres to the Sacramento Valley Colonization Company or SVCC. By 1905 Haggin had moved most of his breeding stock to Kentucky, where his horse ranch is still in operation today (Haggin Oaks Golf Course 2014; Northern Sacramento Chamber of Commerce 2022). By 1935 the McClellan Air Force Base was developed on a portion of the old Rancho property, approximately 1 mile from the project area. The McClellan Air Force base was a hub for supplies and troop transportation for the western United States until it closed in 1995 (Sacramento McClellan Airport 2022).

METHODS

CHRIS Records Search

SWCA requested a confidential search of the CHRIS records at the NCIC, located on the campus of California State University, Sacramento on February 28, 2022. The NCIC maintains records of previously documented cultural resources and technical studies; it also maintains copies of the OHP’s portion of the statewide Historical Resources Inventory. The search included any previously recorded archaeological resources (i.e., excludes historic buildings) within the project area and surrounding 0.5-mile area. The purpose of the CHRIS records search is to identify whether any archaeological resources have been documented in the project area and assess the potential for undocumented resources to be present by comparison to adjacent areas.

Archival Research

SWCA reviewed property-specific historical information and ethnographic literature to identify relevant background for the project area and its historical inhabitants. Research focused on a variety of primary and secondary materials, including historical maps, aerial and ground photographs, ethnographic reports, and technical reports prepared for the project. Sources consulted include the Bureau of Land Management General Land Office (GLO) and the USGS for historical topographic maps and geological surveys of the area, and the USDA for soils information.

Archaeological Survey

On March 1, 2022, SWCA conducted a pedestrian survey of the 4.95-acre project area. The pedestrian survey consisted of systematic surface inspection of all areas with transects walked at 20-m intervals or less to ensure that any surface-exposed artifacts and sites could be identified. The ground surface was examined for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools); historic artifacts (e.g., metal, glass, ceramics); sediment discoloration that might indicate the presence of a cultural midden; roads and trails; and depressions and other features that might indicate the former presence of structures or buildings (e.g., post holes, foundations). The project area was photographed using a digital camera, and property boundaries were identified with a handheld global positioning system (GPS) unit. All field notes, photographs, and records related to the current study are on file at SWCA’s office in Sacramento, California.
RESULTS

Literature Review

Cultural Resources Records Search

SWCA received CHRIS records search results from NCIC on March 7, 2022 (NCIC File No.: SAC-22-59). The results included any previously recorded resources and investigations in and within a 0.50-mile radius of the project area, which are discussed below.

PREVIOUSLY CONDUCTED CULTURAL RESOURCE STUDIES

Results of the CHRIS records search indicate that seven previous cultural resource studies have been completed within a 0.50-mile radius of the project area. All seven previous cultural resource studies were archaeological field studies, one of which had an additional architectural/historical component. No previously conducted cultural resource studies have been completed within the project area. Table 2 summarizes previously conducted studies within a 0.50-mile radius of the project area.

Table 2. Previously Conducted Cultural Resources Studies within a 0.50-mile radius of the project area

<table>
<thead>
<tr>
<th>NCIC Report Number</th>
<th>Title of Study</th>
<th>Report Type</th>
<th>Author (Affiliation)</th>
<th>Year</th>
<th>Proximity to Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>472</td>
<td>Cultural Resources Investigation for the Raley Boulevard Reconstruction Project, Sacramento, California</td>
<td>Archaeological, Field study</td>
<td>David Chavez (David Chavez &amp; Associates)</td>
<td>1991</td>
<td>Within 0.5 mile</td>
</tr>
<tr>
<td>6430</td>
<td>Archaeological Survey of the Proposed I-80 &amp; Bell Cingular Wireless Cell Site (ST-533-01), Sacramento County, California</td>
<td>Archaeological, Field study</td>
<td>Kari Jones (Pacific Legacy, Inc)</td>
<td>2005</td>
<td>Within 0.5 mile</td>
</tr>
<tr>
<td>9792</td>
<td>9792 A &amp; B - Cultural Resource Assessment of APNs 237-0092-009 through -013</td>
<td>Archaeological, Field study</td>
<td>Melinda Peak (Peak &amp; Associates, Inc.)</td>
<td>2007</td>
<td>Within 0.5-mile</td>
</tr>
<tr>
<td>9792B</td>
<td>Cultural Resource Assessment of APN 237-0092-014</td>
<td>Archaeological, Field study</td>
<td>Peak &amp; Associates, Inc.</td>
<td>2007</td>
<td>Within 0.5 mile</td>
</tr>
<tr>
<td>11155</td>
<td>Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SC14226A (Hagginwood PG&amp;E), 1820 Diesel Drive, Sacramento, Sacramento County, California</td>
<td>Archaeological, Field study</td>
<td>Carrie Wills and Jessica Tudor (Michael Brandman Associates)</td>
<td>2012</td>
<td>Within 0.5 mile</td>
</tr>
<tr>
<td>11832</td>
<td>T-Mobile West, LLC Candidate SC14226A (Hagginwood PG&amp;E), 1820 Diesel Drive, Sacramento, Sacramento County, California</td>
<td>Archaeological, Architectural/ Historical, Field study</td>
<td>Carrie D. Wills and Kathleen Crawford (Solano Archaeological Services)</td>
<td>2015</td>
<td>Within 0.5 mile</td>
</tr>
<tr>
<td>13229</td>
<td>Cultural Resources Inventory Report, 1690 Bell Avenue Project, Sacramento County, California</td>
<td>Archaeological, Field study</td>
<td>Jason Coleman (Solano Archaeological Services)</td>
<td>2019</td>
<td>Within 0.5 mile</td>
</tr>
</tbody>
</table>
PREVIOUSLY RECORDED CULTURAL RESOURCES

No previously recorded cultural resources were identified in the project area. Table 3 summarizes previously recorded cultural resources within a 0.50-mile radius of the project area.

Table 3. Previously Recorded Cultural Resources within a 0.50-mile radius of the project area

<table>
<thead>
<tr>
<th>Primary Number</th>
<th>Resource Type</th>
<th>Temporal Affiliation</th>
<th>Resource Description</th>
<th>Recording Year (Name, Affiliation)</th>
<th>Proximity to Project Area</th>
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</thead>
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Sacred Lands File Search and Native American Consultation

A records search request of the SLF was made to NAHC on February 28, 2022, with the intent of identifying sensitive areas and obtaining a list of Native American tribes and/or individuals who may have specific knowledge of the vicinity. The NAHC responded on March 29, 2022. The NAHC provided a list of Native American tribes and individuals who may also have knowledge of cultural resources in the API. SWCA sent outreach letters to all provided Native American contacts via email on April 6, 2022, and via the U.S. Postal Service (USPS) on April 7, 2022.

All outreach to Native American parties and follow-up consultation is being conducted by the City of Sacramento Community Development Department, pursuant to PRC Section 21080.3.1, as amended by the provisions of Assembly Bill 52. Accordingly, the outreach and consultation are being conducted to assess the potential for tribal cultural resources, which may include, but are not limited to, those that are archaeological in nature, that is, a tribal cultural resource that may also be an archaeological resource.

Archival Research

According to the GLO 1871 Survey map, the project area and vicinity is located within Lot Number 37 and is depicted as part of the Rancho Del Paso land claim, an extensive land claim encompassing the Sacramento communities of Del Paso Heights, Rio Linda, Arden-Arcade, and a large portion of Carmichael (U.S. Bureau of Land Management [BLM] 2022). The Southern Pacific Railroad, which is south of the project area, is visible on the 1902 topographic map, which is the earliest available topographic map for the area (NETR Online [NETR] 2022a). Also visible on this early map is an unnamed road located west of the project area. A series of topographic maps spanning 1902 through 1951 show no changes in the API. The 1951 topographic map depicts Bell Avenue abutting the project area to the south and a small structure where the modern-day adjacent gas station is located (NETR 2022b). A 1947 aerial image, the earliest aerial image available, shows the project area as mostly vacant grassland, with the northwestern corner disturbed with vehicle tracts (NETR 2022c). Aerial images in
1957, 1964, and 1966 depict the project area with varying levels of disturbance from vehicles driving over the vacant field (NETR 2022d, 2022e, 2022f). There is no indication of when weed abatement on the project began; however, 2002 is the earliest and clearest aerial image depicting the project area as disked (NETR 2022g). Based on the archival review, the project area has no history of prior development; however, areas directly adjacent to the west and south of the project area are significantly disturbed by the construction of Raley Boulevard and Bell Avenue. The project area itself has routinely been disturbed since at least 2002 by weed abatement activity from mechanical diskig.

Archaeological Survey

The project area is in a highly disturbed vacant, three-parcel lot near the corner of Raley Boulevard and Diesel Drive. Existing access into the project area is provided by a dirt road from Diesel Drive, i.e., the SMUD easement. This driveway is used to gain access to an isolated parcel at the midpoint of the east property line between Diesel Drive and Bell Avenue. Ground visibility in the project area at the time of survey was fair (65–80 percent), with ground cover consisting of ruderal vegetation (Figure 3). The entire project area has been disturbed by frequent weed abatement from mechanical diskig and local traffic accessing adjacent properties (Figure 4). Modern refuse was noted within the project area at the time of survey. No archaeological resources were observed within the project area.

Figure 3. Overview of project area, facing southwest.
Potential for Subsurface Deposits

The project area is situated on a vacant, disturbed three-parcel lot. The area is routinely disturbed due to regular mechanical disking for weed abatement, which would have disturbed, displaced, or otherwise destroyed any archaeological components that once existed on the surface. A large-scale site sensitivity analysis study indicates the general area has a very low sensitivity for buried deposits based on depositional landforms on a regional-level study (Meyer & Rosenthal 2008: Figure 47). More specifically to the project area, the underlying San Joaquin soil series soil is Middle Pleistocene–age alluvium derived from granite (Meyer & Rosenthal 2008; USDA 2022). Meyer & Rosenthal (2008) state where exposed at the surface, San Joaquin soil series deposits “represent alluvial fans and floodplains that were dissected and truncated by erosion.” Historical imagery suggests that the west and south border of the project area has experienced a high degree of previous disturbance from the development of roadways. Aerial images confirm the project area has been disked for weed abatement since 2002. Therefore, it has been determined that there is a low sensitivity for the presence of buried deposits within the API.

CONCLUSION AND RECOMMENDATIONS

SWCA conducted a CHRIS records search and pedestrian survey, and no archaeological resources were identified in the project area. SWCA sent outreach letters via email and USPS to all provided Native American contacts; however, no further correspondence has been received to date. Supplementary archival research indicates the project area has no previous development; however, the project area undergoes regular weed abatement via mechanical disking, which would have disturbed, displaced, or otherwise destroyed any archaeological components that once existed on the surface. A review of ethnographic literature confirmed the project
area is in the territory of the Nisenan, and significant villages once existed near the Sacramento and American Rivers.

The project requires excavation and removal of the underlying alluvial sediments to depths ranging 2 to 5 feet below ground surface. While the likelihood of buried archaeological resources within the project area is considered low, if present, such resources have the potential to be significant under CEQA. The proposed project would adhere to applicable regulatory compliance measures intended to reduce and avoid creating significant impacts to archaeological resources in the event of a discovery during grading, excavation, or other ground-disturbing activities. If such resources are exposed during ground disturbance, work in the immediate vicinity of the find must stop until a qualified archaeologist can evaluate the significance of the find. Ground-disturbing activities may continue in other areas. If the discovery proves significant under CEQA (Section 15064.5f; PRC 21082), additional work such as testing or data recovery may be warranted. Should any prehistoric or historical Native American artifacts be encountered, additional consultation with NAHC-listed tribal groups should be conducted immediately.

The discovery of human remains is always a possibility during ground disturbances; Section 7050.5 of the State of California Health and Safety Code states that no further disturbance shall occur until the Sacramento County Coroner has determined the origin and requisite disposition of the remains pursuant to PRC 5097.98. The Sacramento County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the coroner will notify the NAHC, who will determine and notify an MLD. The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Based on these considerations, SWCA finds that the project would result in less-than-significant impacts to archaeological resources.
REFERENCES CITED/LITERATURE CITED

Beardsley, R. K.

Beck, W. A., and Y. D. Haase

Bennyhoff, James A.

Bennyhoff, James A., and David A. Fredrickson

Bibby, Brian

Chartkoff, Joseph L., and Kerry K. Chartkoff

Cook, Sherburne A.

Fredrickson, David A.
1973 Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.


Grunsky, F. R.
Haggin Oaks Golf Course

Heizer, Robert F.


Hughes, Richard E. (editor)

Jameson, E. W., and H. J. Peeters

Jennings, C. W., C. Gutierrez, W. Bryant, G. Saucedo, and C. Wills

Kroeber, Alfred L.

Major, J.

Meyer, J., and J. Rosenthal

Mithun, Marianne
2001 The Languages of Native North America. Cambridge University Press.

Moratto, M. J.

NETR Online (NETR)


Northern Sacramento Chamber of Commerce

Ragir, S.

Sacramento McClellan Airport

U.S. Bureau of Land Management (BLM)

U.S. Department of Agriculture (USDA) National Resources Conservation Service (NRCS)

U.S. Circuit Court for the State of California

U.S. Department of Interior, National Park Service (NPS)
1983 Archaeology and Historic Preservation; Secretary of the Interior’s Standards and Guidelines. Federal Register 48(190), Washington, D.C.

U.S. Supreme Court

Wallace, William J.
Wilson, Norman L., and Arlean H. Towne

White, Phillip M.
APPENDIX A

Proposed Site Plan