
3.5 - Cultural Resources

3.5.1 - Introduction

This section describes the existing cultural resources setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information provided in the Sacramento General Plan Update Final Environmental Impact Report (FEIR), April 2010, literature review conducted for prehistoric and historic resources within the project area proposed for the FEIR, and a records search conducted by the North Central Information Center in Sacramento for the FEIR.

3.5.2 - Environmental Setting

Overview

The term “cultural resources” encompasses historic, archaeological, and paleontological resources, and burial sites. Below is a brief summary of each component:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the state’s history and are generally less than 200 years old.
- **Archaeological Resources:** Archaeology is the study of prehistoric human activities and cultures. Archaeological resources are generally associated with indigenous cultures.
- **Paleontological Resources:** Paleontology is the study of plant and animal fossils.
- **Burial Sites:** Burial sites are formal or informal locations where human remains, usually associated with indigenous cultures, are interred.

Cultural Setting

Prehistoric Background

Early archaeological investigations in central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area (Schenck and Dawson 1929). The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence (Lillard and Purves 1936; Lillard, et al. 1939). In 1939, Lillard noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in central California (Lillard, et al. 1939). In the late 1940s and early 1950s, Beardsley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that

ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession (Beardsley 1948 and 1954). The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous (Gerow 1954; Gerow 1974; Gerow with Force 1968).

To address some of the flaws in the CCTS system, Fredrickson (1973) introduced a revision that incorporated a system of spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (10000 to 6000 B.C.); Lower, Middle, and Upper Archaic (6000 B.C. to A.D. 500), and Emergent (Upper and Lower, A.D. 500 to 1800). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence (Moratto 1984). In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmill Pattern or Early Horizon (3000 to 1000 B.C.)
- Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)
- Augustine Pattern or Late Horizon (A.D. 500 to historic period)

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmill Pattern or Early Horizon (3000 to 1000 B.C.)

Characterized by the Windmill Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950; Ragir 1972). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicates an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular *Haliotis* and *Olivella* shell beads, and charmstones that usually were perforated.

Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl

technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson (1973) suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time (Lillard, et al. 1939). Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Hughes 1994). During this period, larger populations are suggested by the number and depth of sites compared with the Windmill Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

Augustine Pattern or Late Horizon (A.D. 500 to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of *Halotis* ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson (1976) suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations (Dickel et al. 1984). Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

Native American Background

At the time of European contact, the project vicinity was occupied by the Eastern (Plains) Miwok tribe of California Native Americans. The Plains Miwok occupied the area bounded by both banks of the Sacramento River from Rio Vista to the west to Sacramento to the north, the lower reaches of the

Calaveras and Mokelumne river drainages to the south, and the foothills of the Sierra Nevada to the east. Plains Miwok territory extended approximately 60 miles east to west and 35 miles north to south. Based primarily on linguistic variation, the Eastern Miwok are part of the Miwokan subgroup of the Utian language family. The Eastern Miwok are further divided into five distinct linguistic and cultural groups: Bay Miwok, Plains Miwok, Northern Sierra Miwok, Central Sierra Miwok, and the Southern Sierra Miwok (Levy 1978).

Plains Miwok political organization was centered around the tribelet. Each Plains Miwok tribelet was an independent political entity and functioned primarily within their recognized geographical boundaries. Large, multilineal villages were concentrated on rises along watercourses, and all but the smallest villages were occupied permanently, except during the fall acorn harvest (Bennyhoff 1977). The Plains Miwok constructed houses made of conically arranged wood poles covered with a thatch of grass, brush, or tules, and richer men built semi-subterranean, earth-covered dwellings. Assembly houses were also constructed in villages, and served as the gathering point for ritual and social activities. These structures were semi-subterranean, and consisted of a 3- to 4-foot-deep pit measuring 40 to 50 feet in diameter, which was covered with layers of plant materials and then covered with earth, all supported by a conical roof on four wooden center posts. Other communal buildings constructed in villages would have been a sweathouse used for curing diseases and purification before hunting expeditions, a circular assembly house, and a conical structure built over a bedrock mortar so that acorn and seed grinding could take place in wet weather (Levy 1978).

The Plains Miwok subsistence base varied and included gathering seasonal plant resources, hunting, and fishing. The Plains Miwok did not depend on one staple alone, as their territory provided year-round sources of different food. Acorns were an important food resource and were stored in granaries, in addition to buckeye and pine nuts (gray and sugar pine), and to a lesser extent laurel nuts and hazelnuts. A large variety of seeds and roots, as well as various types of greens and mushrooms, also contributed to their diet. The Plains Miwok conducted an annual burning of the land (in August) to promote the growth of forage for deer, antelope, and tule elk, which they hunted communally and individually. Meat from a hunted animal was divided among tribelet members according to culturally defined rules. Ethnographic reports indicate that the Plains Miwok also caught blacktailed jackrabbits and cottontails with nets in the summer during communal hunting activities, as well as beaver, gray squirrels, ground squirrels, and woodrats, which were caught with snares and traps. Birds were hunted for food, and waterfowl were an important resource. In addition, band-tailed pigeons, red-shafted flickers, jays, and woodpeckers were hunted and used for their feathers and skins to decorate clothing and regalia. Fishing was also important for the Plains Miwok, and salmon provided the dominant food resource, and sturgeon and lampreys were caught as well. In the rivers, mussels and freshwater clams were collected (Bennyhoff 1977; Levy 1978). Archaeological investigations at sites on South Stone Lake (CA-SAC-65 and CA-SAC-145) indicate a considerable reliance on fishing for subsistence among the prehistoric populations (Schulz and Simons 1973; Schulz et al. 1979). In

addition to gathering resources, the Plains Miwok obtained wild tobacco, in addition to planting tobacco seeds and cultivating the plants (Bennyhoff 1977; Levy 1978).

The first contact between the Plains Miwok and Euro-Americans came during Spanish military and religious expeditions. The Franciscan order of the Roman Catholic Church in Spain established Mission San Jose, the fourteenth in the Alta California system, on June 11, 1797 (Bennyhoff 1977; Hoover et al. 1990). Alvarez Gabriel Moraga led an overland expedition from this San Francisco Bay area mission to the Sacramento region in 1808. On May 13, 1817, Father Narciso Duran and Luis Arguello left the beach at the Presidio of San Francisco and sailed up the Sacramento River. They reached a point midway between Clarksburg and Freeport before they turned back and went around Brannan Island (Beck and Haase 1974).

Historic Background

Early Spanish explorers and the Franciscan and Jesuit missionaries who followed them were the first Europeans to reach northern California. The interior of the Sacramento Valley, away from the easily defended and more accessible chain of coastal missions and pueblos, was left largely untouched by the Spanish and “Californios” (Hoover et al. 1990). Settlement of the Sacramento area did not begin until the late 1830s and early 1840s, when entrepreneurs such as John Sutter and Jared Sheldon obtained land grants from the Mexican government, typically in exchange for an agreement to protect Mexican interest in these remote regions (Beck and Haase 1974). In 1839, John Sutter built the earliest Euro-American settlement within Sacramento County. Named Sutter’s Fort, the well-known outpost brought with it an increase in Euro-American trappers, hunters, and settlers to the Sacramento area. As a result of the Mexican War (1847–1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter’s Mill in Coloma, which resulted in a torrent of gold seekers flooding into the Sacramento region. As the population soared and the gold decreased, many of the settlers who decided to stay turned to alternative vocations, particularly agriculture. Many found that the local land was relatively cheap and provided good crops. Raising grain, livestock, and produce to sell to the thousands of miners heading to the gold fields proved profitable ventures. These combined events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital in 1854 also resulted in the area’s increase in socio-political importance.

Local History

In 1850, Elk Grove developed around a stage stop on the Monterey Trail, though after the Union Pacific railroad passed by east of town, Elk Grove’s center shifted to its present location. Elk Grove is approximately 15 miles south of historic Sutter’s Fort and thus became a crossroads for business, entertainment, mail service, and agriculture, and acted as home base for gold miners in the Sierra Nevada foothills.

Initially, the incorporated town “Old Town” Elk Grove was located about a mile east of State Route 99 (SR-99 [formerly US Route 99, the north–south artery of the California Central Valley]). Although the town developed around agriculture, it would eventually become a residential suburb of Sacramento, serving as a bedroom community for business and government employees working in Sacramento. Most of the newer housing developments in Elk Grove are located west between SR-99 and Interstate 5, the major north–south highway along the West Coast, in two areas locally called Laguna Creek and Laguna West. On July 1, 2000, Elk Grove incorporated as a city.

3.5.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation’s significant prehistoric and historic properties. Under 36 CFR 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

State

California Register of Historical Resources

As defined by Section 15064.5(a)(3)(A–D) of the California Environmental Quality Act (CEQA) Guidelines, a resource shall be considered historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (CR). The California Register of Historical Resources and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model, since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. In addition, a

resource that does not meet the NRHP standards may still be considered historically significant at a local or state level.

California Environmental Quality Act

The CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. The CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine if they meet the criteria for listing in the California Register. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the California Register, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a “unique archeological resource” as defined in Public Resources Code (PRC) Section 21083.2, then it would be treated in accordance with the provisions of that section.

Local

City of Elk Grove

However, the proposed project would adjust the City of Elk Grove’s SOI and allow the City the opportunity to file an annexation request with LAFCo to annex lands within the SOIA Area. The City of Elk Grove General Plan establishes goals and policies to guide both present and future development within the City’s jurisdiction. Therefore, the City of Elk Grove’s General Plan policies related to cultural resources that may apply to potential future development in the SOIA Area are provided below:

- **Policy HR-1:** Encourage the preservation and enhancement of existing historical and archaeological resources in the City.
- **HR-1-Action 1:** Develop and update a comprehensive Historic Resource inventory using the National Register, the California Register, California Historical Landmarks, California Points of Historical Interest, and any other structures or properties the City Council determines to have historic value.
The Inventory should contain a map that shows the location of all of the structures with a historically significant designation, and a list of all of the historically significant structures within Elk Grove.
- **HR-1-Action 2:** Establish a Historic Preservation Committee to provide input regarding the City’s historic preservation regulations. This Committee could include members of the public experienced in and knowledgeable about historic resources in general and in the city.
- **Policy HR-3:** Encourage restoration, renovation, and/or rehabilitation of all historic structures.
- **Policy HR-6:** Protect and preserve prehistoric and historic archaeological resources throughout the City.
- **HR-6-Action 1:** In areas identified in the Background Report as having a significant potential for containing archaeological or paleontological artifacts, require completion of a detailed onsite study as part of the environmental review process. Implement all recommended mitigation measures.

- **HR-6-Action 2:** Impose the following conditions on all discretionary projects in areas which do not have a significant potential for containing archaeological or paleontological resources:
 - “The Planning Division shall be notified immediately if any prehistoric, archaeological, or paleontologic artifact is uncovered during construction. All construction must stop and an archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action.”
 - “All construction must stop if any human remains are uncovered, and the County Coroner must be notified according to Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5 (d) and (e) shall be followed.”
- **Policy CO-155:** Utilize the California Archeological and the Sacramento History and Science Division to assist in determining need for survey.
- **Policy CO-156:** Refer projects with identified archaeological and cultural resources to the Cultural Resources Committee to determine significance of resource and recommend appropriate means of protection and mitigation. The Committee shall coordinate with the Native American Heritage Commission in developing recommendations.
- **Policy CO-158:** Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archaeological significance of the site merits excavation and recording procedure. Onsite reinterment shall have priority. The project developer shall provide the burden of proof that off site reinterment is the only feasible alternative. Reinterment shall be the responsibility of local tribal representatives.
- **Policy CO-159:** The cost of all excavation conducted prior to completion of the project shall be the responsibility of the project developer.
- **Policy CO-160:** Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- **Policy CO-161:** As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.
- **Policy CO-162:** As a condition of approval for discretionary projects which are in areas of cultural resource sensitivity, the following procedure shall be included to cover the potential discovery of archaeological resource during development or construction:
 - Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Sacramento County Department of Environmental Review and Assessment shall be immediately notified. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the site with appropriate specialists, as needed. The project proponent

shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

- **Policy CO-163:** Conduct surveys and designate structures with architectural or historical importance on community plan maps. Where appropriate, plans shall designate significant historical architectural districts.
- **Policy CO-164:** Develop local architectural preservation standards drawing from state and Federal guidelines.
- **Policy CO-165:** Refer projects involving structures or within districts having historical or architectural importance to the Cultural Resources Committee to recommend appropriate means of protection and mitigation.
- **Policy CO-166:** Development surrounding areas of historic significance shall have compatible design in order to protect and enhance the historic quality of the areas.

3.5.4 - Methodology

The analysis of impacts to cultural resources from implementation of the 2003 Elk Grove General Plan was evaluated in Section 4.11, Cultural and Paleontological Resources, of the General Plan Environmental Impact Report (FEIR) October 2003. All mitigation measures identified for significant impacts in the Elk Grove General Plan EIR and adopted by the City continue to remain the responsibility of the City as part of implementation of the General Plan. The cultural resource setting for the project area has not changed since adoption of the EIR. Analysis for this section is based on the literature review conducted for prehistoric and historic resources within the project area proposed for the EIR, as well as the information obtained from a record search conducted by the North Central Information Center in Sacramento for the EIR. As shown in Figure 1 in the City of Elk Grove General Plan Background Report on Paleontological, Archaeological, and Historic Resources, the SOIA Area was analyzed as part of the Elk Grove General Plan Study Area (Windmiller 2002).

Results of the North Central Information Center (NCIC) records search conducted in May 2002 identified 93 prehistoric and historic Native American sites within the City of Elk Grove Planning Area. In addition, the NCIC identified 24 historic sites, many of which are remnants of farms and ranches within the Planning Area. The Elk Grove Planning Area contains three sites listed on the National Register of Historic Places; within the city limits, “Old Town” Elk Grove, listed as a district in 1988; the Eastern Star Hall, located approximately 1.5 miles north of the community of Hood along the Sacramento River; and the Ehrhardt House/Jungkeit Dairy, located at the intersection of Dartmoor Way and Percheron Drive. Four State Historical Landmarks are also within the City of Elk

Grove Planning Area: Murphy’s Ranch (#680), near the southwest corner of Grant Line Road and SR-99; the grave of Elitha Cumi Donner Wilder (#719), located in Elk Grove Masonic Cemetery; the site of the first County free library branch, located at 9125 Elk Grove Boulevard; and the grave of Alexander Hamilton Willard (#657), located in Franklin Cemetery.

3.5.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- d) Disturb any human remains, including those interred outside of formal cemeteries

3.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-1: Subsurface construction activities associated with the proposed project may damage or destroy previously undiscovered historic resources.

Impact Analysis

For purposes of this analysis, the term “historic resources” includes a resource listed in or determined to be eligible for listing by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 5024.1; Title 14 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 historical resource survey meeting the PRC Section 5024.1(g) requirements, shall be presumed to be historically or culturally significant.

Any object, building, structure, site, area, place, record, or manuscript—which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California—may be considered a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead

agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (PRC Section 5024.1; Title 14 CCR Section 4852).

The proposed project would expand the City of Elk Grove's Sphere of Influence (SOI), and no physical development is proposed at this time. However, land use assumptions discussed in Section 2, Project Description, indicate that future projects could result in the disturbance, alteration, or destruction of previously unidentified historic resources. Although specific project proposal details are not available at this time, future development could result in the disturbance, alteration, or destruction of previously unidentified historic resources as noted above. Impacts would be less than significant with implementation of MM CUL-1, because it would avoid the disturbance of historic resources.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1 At the time of submittal of any application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will acknowledge that it will impose the following conditions on all discretionary projects:

- Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the City of Elk Grove Planning Department shall be immediately notified. At that time, the City of Elk Grove Planning Department will coordinate any necessary investigation of the site with appropriate specialists, as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.98 of the California Public Resources Code and Section 7050.5 of the California Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.
- The Elk Grove Planning Department shall be notified immediately if any prehistoric, archaeologic, or paleontologic artifact is uncovered during construction. All construction must stop, and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action.

- All construction must stop if any human remains are uncovered, and the County Coroner must be notified according to Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Level of Significance After Mitigation

The above mitigation measure would ensure that no adverse impacts to historic resources would occur by requiring notification and mitigation for accidental discoveries.

Less than significant impact.

Archaeological Resources

Impact CUL-2: **Subsurface construction activities associated with the proposed project may damage or destroy previously undiscovered archaeological resources.**

Impact Analysis

The proposed project would expand the City of Elk Grove's SOI, and no physical development is proposed at this time. However, land use assumptions discussed in Section 2, Project Description, indicate that future projects may uncover previously unknown, buried archaeological resources. Impacts would be less than significant with implementation of MM CUL-2 described below, as it would serve to avoid the disturbance of archaeological resources.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-2 At the time of submittal of any application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will acknowledge that it will impose the following conditions on all discretionary projects:

- Should any archaeological resources be encountered during any development activities, work shall be suspended and the City of Elk Grove Planning Department shall be immediately notified. At that time, the City of Elk Grove Planning Department will coordinate any necessary investigation of the site with appropriate specialists, as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the archaeological resources.
- The City of Elk Grove Planning Department shall be notified immediately if any prehistoric, archaeological, or paleontological artifact is uncovered during construction. All construction must stop, and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric

or historical archaeology shall be retained to evaluate the finds and recommend appropriate action.

Level of Significance After Mitigation

The above mitigation measure would ensure that no adverse impacts to previously undiscovered archeological resources would occur through necessary investigations and notification.

Less than significant impact.

Paleontological Resources

Impact CUL-3: Subsurface construction activities associated with the proposed project may damage or destroy previously undiscovered paleontological resources.

Impact Analysis

Paleontology is defined as the science examining past geological periods as know from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. CEQA offers protection for these sensitive resources and requires that they be addressed during the EIR process.

The Elk Grove General Plan 2003 EIR Paleontological Resources section notes that a file search was conducted in the GeoRef database covering the years 1785 to the present. In addition, files from the Museum of Paleontology at the University of California Berkeley were reviewed. A broad, reconnaissance-level field survey of the Planning Area for the purpose of inspecting the land surface and potential outcrops of fossiliferous geological formations was also conducted. No fossils have been officially reported from the Planning Area, although there are instances of local finds. In 1959, a Pleistocene bone bed within the Riverbank Formation along the west side of Deer Creek was discovered by a local farmer. Additional fossils recovered from the Riverbank Formation are typically large, late Pleistocene vertebrates.

The proposed project would expand the City of Elk Grove's SOI, and no physical development is proposed at this time. However, land use assumptions discussed in Section 2, Project Description, indicate that future projects could result in the disturbance, alteration, or destruction of previously unidentified paleontological resources. Any future activity would be subject to an independent CEQA review and would address impacts to paleontological resources and prescribe appropriate mitigation measures based on the type of activity proposed. Impacts would be less than significant with implementation of MM CUL-3 described below, because it would avoid the disturbance of paleontological resources.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 At the time of submittal of any application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will acknowledge that it will impose the following conditions on all discretionary projects:

- Should any paleontologic artifact be encountered during any development activities, work shall be suspended and the City of Elk Grove Planning Department shall be immediately notified. At that time, the City of Elk Grove Planning Department will coordinate any necessary investigation of the site with appropriate specialists, as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the paleontologic artifact.
- The City of Elk Grove Planning Department shall be notified immediately if any prehistoric, archaeologic, or paleontologic artifact is uncovered during construction. All construction must stop, and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action.

Level of Significance After Mitigation

The above mitigation measure would ensure that no adverse impacts to archaeological or paleontological resources would occur by requiring notification and mitigation of resources discovered.

Less than significant impact.

Burial Sites

Impact CUL-4: **Subsurface construction activities associated with the proposed project may damage or destroy previously undiscovered human remains.**

Impact Analysis

The proposed project would expand the City of Elk Grove's SOI, and no physical development is proposed at this time. However, land use assumptions discussed in Section 2, Project Description, indicate that subsurface construction activities associated with a future project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. Accordingly, this is a potentially significant impact.

As such, Mitigation Measure CUL-4 requires standard inadvertent discovery procedures to be implemented in the event that human remains are encountered during construction. With the implementation of mitigation, impacts to burial sites would be reduced to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure MM CUL-1.

Level of Significance After Mitigation

Less than significant impact.

