3.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section analyzes and evaluates the potential impacts of the potential for future development in the Bilby Ridge SOIA on known and unknown archaeological, historical, paleontological, and tribal cultural resources. The analysis includes a description of the existing environmental conditions, the methods used for assessment, the potential direct and indirect impacts of project implementation, and mitigation measures recommended to address impacts determined to be significant or potentially significant.

Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include pre-historic resources, historic-era resources, tribal cultural resources, and fossil deposits of paleontological importance.

Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or architectural) resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads). Tribal cultural resources were added as a resource subject to review under CEQA, effective January 1, 2015 (as defined by Assembly Bill [AB] 52, Statutes of 2014, in Public Resources Code [PRC] Section 21074). This is a new category of resources under CEQA and includes site features, places, cultural landscapes, sacred places or objects, which are of cultural value to a Tribe. Paleontological resources include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains that are more than 5,000 years old and occur mainly in Pleistocene or older sedimentary rock units.

One comment letter regarding cultural resources was received in response to the Notice of Preparation. The Native American Heritage Commission requested AB 52 and Senate Bill (SB) 18 compliance information; while SB 18 does not apply to the project because there is not a General Plan amendment associated with the project (which is the trigger for SB 18 compliance), SB 18 is not a CEQA requirement and, therefore, is not discussed in this section. AB 52 compliance is described below.

3.5.1 Environmental Setting

PALEONTOLOGICAL SETTING

Significant nonrenewable vertebrate and invertebrate fossils and unique geologic units have been documented throughout California. The fossil-yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks (refer to geologic timescale in Table 3.5-1). Paleontological potential refers to the likelihood that a rock unit will yield a unique or significant paleontological resource. All sedimentary rocks, some volcanic rocks, and some low-grade metamorphic rocks have potential to yield significant paleontological resources. Depending on location, the paleontological potential of subsurface materials generally increases with depth beneath the surface, as well as with proximity to known fossiliferous deposits.

Pleistocene or older (older than 11,000 years) continental sedimentary deposits are considered to have a high paleontological potential, while Holocene-age deposits (less than 10,000 years old) are generally considered to have a low paleontological potential because they are geologically immature and are unlikely to have fossilized the remains of organisms. Metamorphic and igneous rocks have a low paleontological potential, either because they formed beneath the surface of the earth (such as granite), or because they have been altered under high heat and pressures, chaotically mixed or severely fractured. Generally, the processes that form igneous and metamorphic rocks are too destructive to preserve identifiable fossil remains.

Table 3.5-1 Divisions of Geologic Time

Era	Period	Time in Millions of Years Ago (approximately)	Epoch
Cenozoic	Quaternary	< 0.01	Holocene
		2.6	Pleistocene
	Tertiary	5.3	Pliocene
		23	Miocene
		34	Oligocene
		56	Eocene
		65	Paleocene
Mesozoic	Cretaceous	145	-
	Jurassic	200	-
	Triassic	251	-
Paleozoic	Permian	299	-
	Carboniferous	359	-
	Devonian	416	-
	Silurian	444	-
	Ordovician	488	-
	Cambrian	542	-
Precambrian		2,500	-

Source: U.S. Geological Survey 2010

The Bilby Ridge SOIA site is located within the Great Valley geomorphic province, which is primarily described as a relatively flat alluvial plain, about 50 miles wide and 400 miles long, with thick sequences of sedimentary deposits of Jurassic through Holocene age. The Great Valley geomorphic province is bounded on the north by the Klamath and Cascade mountain ranges, on the east by the Sierra Nevada Mountains, and on the west by the California Coast Mountain Range. The project site contains alluvium geologic units. These geologic units are mostly located around the Sacramento and Cosumnes rivers and are considered to have paleontological resource sensitivity.

According to the *City of Elk Grove General Plan Draft EIR* (City of Elk Grove 2003), fossils recovered to date from the Riverbank Formation are typically large, late Pleistocene vertebrates; although fish, frogs, snakes, turtles and a few plants such as *Prunus* (prune), *Platanus* (sycamore), and *Salix* (willow) are also typical. The typically large, Rancholabran vertebrates include *Bison* (bison), *Equus* (horse), *Camelops* (camel), *Mammuthus* (mammoth), *Paramylodon* (ground sloth), and *Canis* (wolf).

PREHISTORIC SETTING

Although human occupation of the Central Valley may extend back 10,000 before present (B.P.), reliable evidence of such an early human presence is lacking and may be deeply buried. The prehistoric setting can be categorized into the following periods.

The Paleo-Indian Period: The Paleo-Indian Period (12,000 to 10,500 B.P.) saw the first demonstrated entry and spread of humans into California. Characteristic artifacts recovered from archaeological sites of this time period include fluted projectile points (constructed from chipped stones that have a long groove down the center called a "flute") and large, roughly fashioned cobble and bifacially-flaked stone tools that were used in hunting the mastodon, bison, and mammoth that roamed the land during this time.

The Lower Archaic Period: The beginning of the Lower Archaic Period (10,500 to 7500 B.P.) coincides with that of the Middle Holocene climatic change which resulted in widespread floodplain deposition. This episode resulted in most of the early archaeological deposits being buried. Most tools were manufactured of local materials, and distinctive artifact types include large dart points and the milling slab and handstone.

The Middle Archaic Period: The Middle Archaic Period (7500 to 2500 B.P.) is characterized by warm, dry conditions which brought about the drying up of pluvial lakes. Economies were more diversified and may have included the introduction of acorn processing technology, although hunting remained an important source of food. Artifacts characteristic of this period include milling stones and pestles and a continued use of a variety of implements interpreted as large dart points.

The Upper Archaic Period: The Upper Archaic Period (2500 to 850 B.P.) corresponds with a sudden turn to a cooler, wetter and more stable climate. The development of status distinctions based upon wealth is well documented in the archaeological record. The development of specialized tools, such as bone implements and stone plummets, as well as manufactured shell goods, were prolific during this time. The regional variance of economies was largely because of the seasonality of resources which were harvested and processed in large quantities.

The Emergent Period: Several technological and social changes distinguish the Emergent Period (850 B.P. to Historic) from earlier cultural manifestations. The bow and arrow were introduced, ultimately replacing the dart and throwing spear, and territorial boundaries between groups became well established. In the latter portion of this Period (450 to 1800 B.P.), exchange relations became highly regularized and sophisticated. The clam disk bead developed as a monetary unit of exchange, and increasing quantities of goods moved greater distances. It was at the end of this Period that contact with Euroamericans became commonplace, eventually leading to intense pressures on Native American populations.

ETHNOGRAPHIC SETTING

The Bilby Ridge SOIA area (or "project site") lies within the ethnographic territory of the Plains Miwok, which are a distinct linguistic group of the Utian language family of the Penutian Stock. 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.

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. 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.

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). 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. Ethnographic reports indicate that the Plains Miwok also caught black-tailed 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. Fishing was also important for the Plains Miwok, and salmon provided the dominant food resource. In the rivers, mussels and freshwater clams were collected. In addition to gathering resources, the Plains Miwok obtained wild tobacco, in addition to planting tobacco seeds and cultivating the plants.

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. Alverez 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.

HISTORIC SETTING

Regional History

Spanish exploration of the Central Valley dates to the late 1700s, but exploration of the northern section of the Central Valley and contact with its Native American population did not begin until the early 1800s, as described above. The second quarter of the nineteenth century encompasses the Mexican Period (ca. 1821-1848) in California. This period is an outgrowth of the Mexican Revolution, and its accompanying social and political views affected the mission system across California. In 1833 the missions were secularized and their lands divided among the *Californios* as land grants called *ranchos*. These ranchos facilitated the growth of a semi-aristocratic group that controlled the larger ranchos. The work on these large tracts of land was accomplished by the forced labor of local Native Americans. The closest ranchos to the project area are in Sacramento County near the southern boundary of Placer County. These ranchos include the Rancho de Paso, the San Juan, and the Río de los Americanos.

Simultaneously with the exploration of the Central Valley, the flanks of the Sierra Nevada trails were being blazed across the plains and mountains facilitating the westward migration of Euroamericans. These early immigrants to California are typified by groups such as the 1841 Bartleson-Bidwell party and the 1844 Stevens-Murphy party. The commencement of the Mexican-American War in 1846 also affected the exploration and development of California, including the identification of new trails across the Sierra Nevada. The exploits of the Mormon Battalion and the establishment of the Mormon Emigrant Trail across the Sierra Nevada highlight these activities.

The discovery of gold at Sutter's Mill in Coloma in 1848 was the catalyst that caused a dramatic alteration of both Native American and Euroamerican cultural patterns in California. Once news of the discovery of gold spread, a flood of Euroamericans entered the region, and gravitated to the area of the "Mother Lode." Initially, the Euroamerican population grew slowly but soon exploded as the presence of large deposits of gold was confirmed in the Sacramento area. The population of California quickly swelled from an estimated 4,000 Euroamericans in 1848 to 500,000 in 1850. Sacramento, established in 1848 by John A. Sutter, also grew in population and was incorporated as a city in 1850.

Local History

In 1850, Elk Grove developed around a stage stop on the Monterey Trail, though after the railroad was constructed 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 unincorporated townsite of "Old Town" Elk Grove was located about a mile east of State Route 99 (SR 99). 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 the City of 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.

RECORDS SEARCHES, SURVEYS, AND CONSULTATION

Paleontological Resources

A search of the University of California Museum of Paleontology (UCMP) database was conducted on April 17, 2017. Records of paleontological finds maintained by the UCMP (2017) state that there are 13 localities at which fossil remains have been found in Sacramento County. These occur in the Mariposa and Riverbank geologic formations. The database did not list any paleontological resources in the project site; however, three resources have been recorded along the Cosumnes River.

Archaeological and Historical Resources

A confidential records search for the project site and a surrounding 0.25-mile radius was conducted by Ascent Environmental at the North Central Information Center (NCIC) on May 4, 2017 (NCIC File No. SAC-17-59). The search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), *California Inventory of Historic Resources* (1976), *California Points of Historical Interest* (May 1992 and updates), Directory of Properties in the Historic Property Data File, Archaeological Determinations of Eligibility (State Office of Historic Preservation computer lists dated March 20, 2014), records of previously recorded cultural resources, records of previous field studies, and other historic maps and documents. The records search revealed no resources on the project site. Seven cultural resources within a 0.25-mile radius of the project site were identified; one prehistoric archaeological site and six historical sites (buildings and structures). No NRHP- or CRHR-eligible resources were identified.

Tribal Cultural Resources

As described further below, AB 52 applies to those projects for which a lead agency had issued a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration on or after July 1, 2015. Sacramento LAFCo mailed letters to the following tribal contacts on April 19, 2017.

- ▲ The Honorable Rhonda Morningstar Pope, Chairperson for Buena Vista Rancheria of Me-Wuk Indians;
- ▲ The Honorable Don Ryberg, Chairperson, and Grayson Coney, Cultural Director for T' Si-Akim Maidu:
- ▲ Cosme Valdez, Interim Chief Executive Officer for Nashville-El Dorado Miwok;
- Dr. Crystal Martinez, Chairperson for the lone Band of Miwok Indians;
- Raymond Hitchcock, Chairperson for Wilton Rancheria;
- Nicholas Fonseca, Chairperson for Shingle Springs Band of Miwok Indians; and
- Gene Whitehouse, Chairperson for United Auburn Indian Community (UAIC) of the Auburn Rancheria.

Robert Columbro, Tribal Historic Preservation Officer for Buena Vista Rancheria, responded on April 26, 2017 and declined consultation. UAIC responded on May 2, 2017, requesting copies of existing cultural reports and current records search results, in addition to initiating formal consultation. These documents were sent to UAIC on May 26, 2017. UAIC did not respond to meeting requests identified in the May 26, 2017, correspondence or subsequent phone and e-mail messages sent by the Sacramento LAFCo Executive Director. Thus, consultation was completed and no tribal cultural resources were identified at the site by UAIC. No responses were received from T' Si-Akim Maidu, Nashville-El Dorado Miwok, Ione Band of Miwok Indians, Wilton Rancheria, or Shingle Springs Band of Miwok Indians.

3.5.2 Regulatory Framework

FEDERAL

National Historic Preservation Act

Among those statutes enacted by Congress that affect historic properties, the National Historic Preservation Act of 1966 (NHPA) is the most significant law that addresses historic preservation. One of the most important provisions of the NHPA is the establishment of the NRHP, the official designation of historical resources. Districts, sites, buildings, structures, and objects are eligible for listing in the NRHP. Nominations

are listed if they are significant in American history, architecture, archeology, engineering, and culture. The NRHP is administered by the National Park Service. To be eligible, a property must be significant under criterion A (history), B (persons), or C (design/construction); possess integrity; and ordinarily be 50 years of age or more.

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally-assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

Once a heritage resource has been recorded and if it is determined to be significant, the potential impacts (or effects) of a project on a heritage property are assessed. Federal regulatory impact thresholds are contained in Section 106 of the NHPA and accompanying regulations (36 Code of Federal Regulations [CFR] Part 800). Section 106 requires that federal agencies consider the effects of their actions on significant archaeological properties before implementing a project or "undertaking." The criteria of effect are found in 36 CFR 800.0(a) and state that:

An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register.

The Advisory Council's regulations require that the federal agency apply the criteria of adverse effect to historic properties that would be affected by a proposed undertaking (36 CFR 800.9b). An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association, or the quality of data suitable for scientific analysis.

STATE

California Register of Historical Resources

All properties listed in or formally determined eligible for listing in the NRHP are eligible for the CRHR. The CRHR is a listing of State of California resources that are significant within the context of California's history. The CRHR is a statewide program of similar scope and with similar criteria for inclusion as those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historic resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850. The CRHR criteria are similar to the NRHP criteria and are tied to CEQA because any resource that meets the criteria below is considered a historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

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

Similar to the NRHP, a resource must meet one of the above criteria and retain integrity. The CRHR uses the same seven aspects of integrity as the NRHP.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to PRC Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC, Section 21084.1; determining significant impacts to historical and archaeological resources is described in the State CEQA Guidelines, Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 5024.1).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1), including the following:
 - a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects would impact unique archaeological resources. PRC Section 21083.2, subdivision (g), states that unique archaeological resource means 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.

Tribal Cultural Resources

CEQA also requires lead agencies to consider whether projects will impact tribal cultural resources. PRC Section 21074 states the following:

- a) "Tribal cultural resources" are either of the following:
 - 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural and Sacred Sites Act applies to both State and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and the county coroner be notified. If the remains are of a Native American, the coroner must notify the Native American Heritage Commission (NAHC). The NAHC then notifies those persons most likely to be descended from the Native American's remains. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

California Health and Safety Code

Section 7052 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony. Section 7050.5 (b) of the California Health and Safety Code specifies protocol when human remains are discovered. The code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the

recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98.

Public Resources Code, Section 5097

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Assembly Bill 52

AB 52, signed by the California Governor in September of 2014, establishes a new class of resources under CEQA: "tribal cultural resources." It requires that lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation once the lead agency determines that the application for the project is complete, before the issuance of a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration. AB 52 also requires revision to CEQA Appendix G, the environmental checklist. This revision created a new category for "tribal cultural resources."

LOCAL

The project site lies within the jurisdictional boundaries of Sacramento County; therefore, the County's policies, as well as the Sacramento LAFCo's polices, would apply. Furthermore, if the SOIA is approved, it would likely lead to annexation to the City of Elk Grove. Thus, applicable policies of the City of Elk Grove's General Plan are described below.

Sacramento County General Plan

The Sacramento County General Plan contains policies and actions relevant to the inventory, protection, and enhancement of significant archaeological and historical resources within the SOIA Area. Relevant policies and actions include:

- ▲ 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.
- ▲ 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 archaeologic 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.
- ▲ CO-159: The cost of all excavation conducted prior to completion of the project shall be the responsibility of the project developer.
- ▲ CO-160: Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.

- ▲ 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.
- ▲ 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.
- ▲ 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.
- ▲ CO-164: Develop local architectural preservation standards drawing from state and Federal guidelines.
- ▲ 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.

City of Elk Grove General Plan

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 Bilby Ridge SOIA site. 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 site are provided below:

- → HR-1: Encourage the preservation and enhancement of existing historical and archaeological resources in the City.
- ▲ HR-3: Encourage restoration, renovation, and/or rehabilitation of all historic structures.
- ▲ 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 on-site 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, 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 California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA [Guidelines] Section 15064.5 (d) and (e) shall be followed."

3.5.3 Environmental Impacts and Mitigation Measures

ANALYSIS METHODOLOGY

The analysis is informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources. In determining the level of significance, the analysis assumes that the project would comply with relevant, federal, state, and local laws, regulations, and ordinances. While no development is proposed on the Bilby Ridge SOIA site, the impact analysis evaluates impacts from development of the site. The primary sources of information for this section are the *Kammerer Road/Highway* 99 SOIA EIR prepared for Sacramento LAFCo (AECOM 2017) and the *City of Elk Grove General Plan Draft EIR* (City of Elk Grove 2003).

This impact analysis is consistent with the City of Elk Grove General Plan policies HR-1, HR-3, and HR-6 regarding the evaluation of potential impacts and mitigation measures for archaeological, historic, and cultural resources.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, the project would result in a potentially significant impact on cultural resources if it would:

- cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;
- cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5;
- disturb any human remains, including those interred outside of dedicated cemeteries;
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.

ISSUES NOT EVALUATED FURTHER

All issues applicable to cultural resources listed under the significance criteria above are addressed in this section.

IMPACT ANALYSIS

Impact 3.5-1: Change in the significance of an historical resource.

The NCIC records search revealed no historical resources on the project site. There are a number of historicage buildings on the projects site that have not been evaluated for NRHP- or CRHR-eligibility. If the SOIA is approved and subsequent annexation of all or a portion of the site to the City of Elk Grove occurs, development of the SOIA area could result in damage to or destruction to these buildings. If they are found to be historically significant, the impact to historical resources would be **potentially significant**.

Historical (or architectural) resources include standing buildings (e.g., houses, barns, cabins) and intact structures (e.g., dams, bridges, water conveyance systems). The NCIC records search revealed no historical resources on the project site; however, seven historical sites were located within the 0.25-mile buffer area. There are a number of historic-age (over 45 years old) ranch and farm buildings and structures on the project site; however, access to the site was not available at the time of the preparation of this EIR to evaluate whether the buildings would be eligible as historic resources for inclusion in the NRHP or CRHR.

The Bilby Ridge SOIA does not include land use designations or zoning as specific approval actions and, therefore, there are no associated construction activities that would adversely affect historical resources. However, approval of the SOIA could remove and obstacle to future annexation and development of the site in a manner consistent with the conceptual land use plan. Development of the site SOIA area could result in damage to or destruction of a building or structure that has not yet been evaluated for historical significance. Therefore, the impact to historical resources would be **potentially significant**.

Mitigation Measure 3.5-1: Conduct project-specific level surveys and identify measures to protect identified historic resources.

At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects:

- ✓ Prior to construction activities, project sponsors shall identify and evaluate all historic-age (over 45-years in age) buildings and structures that could potentially be impacted by the project. This would include preparation of an historic structure report and evaluation of resources to determine their eligibility for recognition under State, federal, or local historic preservation criteria. The evaluation shall be prepared by an architectural historian, or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation should comply with CEQA Guidelines section 15064.5(b), and, if federal funding or permits are required, with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470 et seq.). Study recommendations shall be implemented.
- ✓ If resources eligible for inclusion in the NRHP or CRHR are identified, an assessment of project impacts on these resources shall be included in the report, as well as detailed measures to avoid impacts. If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings and City of Elk Grove General Plan Policy HR-1 and HR-3.

Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.

Significance after Mitigation

Implementation of Mitigation Measures 3.5-1 would reduce potentially significant impacts to historic resources on the Bilby Ridge SOIA site because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. LAFCo would

condition future annexation on compliance with Mitigation Measure 3.5-1, and implementation of this mitigation measure would reduce impact to a **less-than-significant** level.

Impact 3.5-2: Disturb unique archaeological resources.

Based on the results of the records search, there are no known archaeological sites within the Bilby Ridge SOIA area. However, ground-disturbing activities from development upon annexation to the City of Elk Grove could result in discovery or damage of as yet undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5. This would be a **potentially significant** impact.

The NCIC records search revealed no archaeological resources on the project site; one prehistoric site was located within the 0.25-mile buffer area. As shown on Figure 4.11-1 of the City of Elk Grove General Plan EIR, the Bilby Ridge SOIA site is located within an area of cultural resource sensitivity. Although no NRHP- or CRHR-listed or eligible resources, or unique archaeological resources have been documented in the project site, the project is located in a region where prehistoric and historic-era cultural resources have been recorded and there remains a potential that undocumented cultural resources could be unearthed or otherwise discovered during ground-disturbing and construction activities. Prehistoric or ethnohistoric materials might include flaked stone tools, tool-making debris, stone milling tools, shell or bone items, and fire-affected rock or soil darkened by cultural activities (midden); examples of significant discoveries would include villages and cemeteries. Historic materials might include metal, glass, or ceramic artifacts; examples of significant discoveries might include former privies or refuse pits.

The Bilby Ridge SOIA does not include land use designations or zoning as specific approval actions and, therefore, would have no construction-related ground disturbing activities which could adversely affect archaeological resources. However, approval of the SOIA could remove and obstacle to future annexation and development of the site in a manner consistent with the conceptual land use plan. Development of the SOIA area would result in soil disturbance and because of the possible presence of undocumented cultural resources within the project site, construction-related impacts on cultural resources would be **potentially significant**.

Mitigation Measure 3.5-2: Avoid potential effects on unique archaeological resources.

At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects:

- Before construction activities, the applicant shall retain a qualified archaeologist to conduct archaeological surveys for the site and any required off-site improvements, in accordance with the current City of Elk Grove General Plan Policy HR-6-Action 1. Project sponsors shall follow recommendations identified in the survey, which may include activities such as subsurface testing, designing and implementing a Worker Environmental Awareness Program, construction monitoring by a qualified archaeologist, avoidance of sites, or preservation in place.
- ✓ In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), in accordance with current Elk Grove General Plan Policy HR-6-Action 2, all ground-disturbing activity in the area of the discovery shall be halted and the City of Elk Grove Planning Division shall be notified immediately. A qualified archaeologist shall be retained to assess the significance of the find. If the find is a prehistoric archeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet NRHP or CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the project applicant to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics, and other factors, follow

accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to NCIC.

Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.

Significance after Mitigation

LAFCo would condition future annexation on compliance with Mitigation Measure 3.5-2; the City of Elk Grove would also require compliance with current General Plan Policy HR-6-Action 1 and Action 2. Implementation of Mitigation Measure 3.5-2 would reduce potentially significant impacts to archaeological resources because mitigation would be developed in coordination with the appropriate federal, state, and/or local agency(ies) and tribes to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. By providing an opportunity to avoid disturbance, disruption, or destruction of archaeological resources, this impact would be reduced to a **less-than-significant** level.

Impact 3.5-3: Accidental discovery of human remains.

Although unlikely, construction and excavation activities associated with future development of the SOIA area could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 in the event that human remains are found would make this impact less than significant.

Based on documentary research, no evidence suggests that any prehistoric or historic-era marked or unmarked human interments are present within the Bilby Ridge SOIA area. The location of grave sites and Native American remains can occur outside of dedicated cemeteries or burial sites. Ground-disturbing construction activities could uncover previously unknown human remains, which could be archaeologically or culturally significant. Even if the SOIA were approved, land use activities within the project site would remain under the jurisdiction of Sacramento County until annexation is approved by LAFCo at some future time. The Bilby Ridge SOIA does not include land use designations or zoning as specific approval actions. However, approval of the SOIA could remove and obstacle to future annexation and development of the site in a manner consistent with the conceptual land use plan. Development of the SOIA area would result in soil disturbance; therefore, the potential exists for previously undiscovered human remains to be discovered.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097. If human remains are discovered during any construction activities, potentially damaging ground-disturbing activities in the area of the remains would be halted immediately, and the project applicant would notify the Sacramento County coroner and the NAHC immediately, according to PRC Section 5097.98 and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the NAHC to be Native American, the guidelines of the NAHC would be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the archaeologist and the NAHC-designated most likely descendent would determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.5-4: Disturb a unique paleontological resource.

Any future development within the SOIA area could potentially affect undiscovered paleontological resources. This would be a **potentially significant** impact.

As described previously, the Bilby Ridge SOIA area is located within the Pleistocene nonmarine sedimentary rocks (Riverbank Formation) and Quaternary alluvium geologic units. These geologic units are considered to be sensitive for paleontological resource. A search of the UCMP database identified 13 localities at which fossil remains have been found in Sacramento County. These occur in the Mariposa and Riverbank geologic formations. According to the City of Elk Grove General Plan Draft EIR, 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. Therefore, if paleontological resources are present on the site, project-related earth-disturbing activities could affect the integrity of a paleontological site, thereby causing a substantial change in the significance of the resource.

The Bilby Ridge SOIA does not include land use designations or zoning as specific approval actions and, therefore, would have no construction-related ground disturbing activities that could adversely affect paleontological resources. However, approval of the SOIA could remove and obstacle to future annexation and development of the site in a manner consistent with the conceptual land use plan. Development of the SOIA area would result in construction activities such as digging, excavation, trenching, and other earthwork and could have the potential to disturb or damage paleontological resources. Therefore, the project would have the potential to damage previously unknown and potentially significant paleontological resources. The impact is **potentially significant**.

Mitigation Measure 3.5-4: Avoid impact to unique paleontological resources.

At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects:

- Consistent with General Plan Policy HR-6-Action 1 and Action 2, before the start of on- or off-site earthmoving activities that would disturb 1 acre of land or more within the Riverbank Formations, project applicants shall inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.
- ✓ If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work near the find and notify the City of Elk Grove.
- ✓ The applicant shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resource or resources were discovered. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.

Significance after Mitigation

Mitigation Measure 3.5-4 would create a new implementation program that contains additional resource disturbance prevention activities and a cease-work requirement upon paleontological resource discovery. With implementation of these changes, impacts would be reduced because construction workers and operational personnel would be alerted to the possibility of encountering paleontological resources and professionally accepted and legally compliant procedures for the discovery of paleontological resources would be implemented in the event of a find. The impact is considered **less than significant.**

Impact 3.5-5: Change in the significance of a tribal cultural resource.

Consultation with UIAC has resulted in no resources identified as TCRs as described under AB 52 on or near the SOIA area. However, subsequent discretionary projects upon annexation to the City of EIk Grove may be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which may include additional AB 52 consultation that could lead to the identification of TCRs. Compliance with PRC 21080.3.1 would make this impact less than significant.

As part of the 2013/2014 legislative session, AB 52 established a new class of resources under CEQA, TCRs, and requires that lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation once the lead agency determines that the application for the project is complete. As detailed above, Sacramento LAFCo sent letters to eight tribal representatives in compliance with AB 52. UAIC responded on May 2, 2017, requesting copies of existing cultural reports and current records search results, in addition to initiating formal consultation. These documents were sent to UAIC on May 26, 2017. UAIC did not respond to meeting requests identified in the May 26, 2017, correspondence or subsequent phone and e-mail messages sent by the Sacramento LAFCo Executive Director. Thus, consultation was completed and no specific tribal cultural resources were identified at the site by UAIC.

The consultation resulted in the conclusion that there are no resources known to exist in the SOIA area that the Tribes consider to be a TCR as described under AB 52 and defined in PRC Section 21074. To be considered a TCR, a resource must be either:

- 1. listed or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- a resource that the lead agency determines, in its discretion and supported by substantial evidence, to treat as a tribal cultural resource pursuant to the criteria in PRC Section 50241(c). PRC Section 5024.1(c) provides that a resource is meets criteria for listing as an historic resource in the California Register if in meets any of the following:
 - (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
 - (2) Is associated with the lives of persons important in our past.
 - (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
 - (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Although no resources within the project site have been identified as meeting any of the PRC Section 5024.1(c) criteria and the Bilby Ridge SOIA does not include construction activities and, therefore, would have no impact on TCRs, it is possible that subsequent discretionary projects upon annexation to the City of Elk Grove may be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which may include additional AB 52 consultation that could lead to the identification of TCRs.

California law recognizes the need to identify and protect TCRs; the procedures for the treatment of Native American resources are contained in California PRC 21081.3.1.

■ Within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the

request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

- Public agencies shall, when feasible, avoid damaging effects to any TCR (PRC Section 21084.3 (a).). If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the PRC describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts (PRC Section 21084.3 (b)). Examples include:
 - (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - (A) Protecting the cultural character and integrity of the resource
 - (B) Protecting the traditional use of the resource
 - (C) Protecting the confidentiality of the resource.
 - (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - (4) Protecting the resource.

Compliance with California PRC 21080.3.1 would provide an opportunity to avoid or minimize the disturbance of previously unknown TCRs, and to appropriately treat any that are discovered. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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