

4.3 ARCHAEOLOGICAL AND HISTORICAL RESOURCES

This section considers the effects of the proposed Sierra Colina Village Project on prehistoric and historic-era cultural resources located on the project site. This analysis (1) describes the criteria for determining cultural resource significance, including guidance provided in the Tahoe Regional Planning Agency (TRPA) Code of Ordinances and the Douglas County Master Plan; (2) provides an inventory of known cultural resources on the project site; (3) summarizes previous archaeological investigations; and (4) evaluates the potential project impacts to cultural resources and identifies potential mitigation measures that would reduce those impacts to less-than-significant levels.

4.3.1 REGULATORY BACKGROUND

The criteria for determining the significance of cultural resources in the project area are based on the TRPA Code of Ordinances, Chapter 29, “Historic Resource Protection,” and Goals and Policies outlined in Chapters 3 and 6 of the *Douglas County Master Plan*. These regulations are described in greater detail below.

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Because there is no involvement by federal agencies in the project, no federal plans, policies, regulations, or laws related to cultural resources are applicable. However, federal regulations, such as Section 106 of the National Historic Preservation Act of 1966 (NHPA), provide the foundation and impetus for the cultural resources ordinances and provisions of the TRPA.

TRPA Code of Ordinances

In compliance with federal law and Douglas County policies, TRPA has adopted guidelines to determine cultural resource significance and impacts in the Lake Tahoe Basin. Chapter 29, Historic Resource Protection, Subsection 29.5 of the TRPA Code of Ordinances states that “sites, objects, structures, districts or other resources, eligible for designation as resources of historical, cultural, archaeological, paleontological, or architectural significance locally, regionally, state-wide, or nationally shall meet at least one of the following criteria”:

(a) Resources associated with historically significant events and sites.

Resources shall exemplify the broad cultural, political, economic, social, civic, or military history of the region, the states, or the nation, or be associated with events that have made a significant contribution to the broad patterns of history, including regional history. Such resources must meet one of the following criteria:

- (1) Association with an important community function in the past;
- (2) Association with a memorable happening in the past; or
- (3) Contain outstanding qualities reminiscent of an early stage of development in the region.

(b) Resources associated with significant persons.

Resources that are associated with the lives of persons significant in history, including regional history, such as:

- (1) Buildings or structures associated with a locally, regionally, or nationally known person;
- (2) Notable examples, or best surviving works, of a pioneer architect, designer, or master builder; or
- (3) Structures associated with life or work of significant persons.

(c) Resources embodying distinctive characteristics.

Resources that embody the distinctive characteristics of a type, period, or method of construction, that possess high artistic values, or that represent a significant and distinguishable entity but whose components may lack individual distinction, are eligible. Works of a master builder, designer or architect are also eligible. Resources may be classified as significant if they are a prototype of, or a representative

example of, a period style, architectural movement, or method of construction unique in the region, the states, or the nation.

(d) State and Federal Guidelines

Archeological or paleontological resources protected, or eligible for protection, under state and federal guidelines, are eligible.

(e) Prehistoric sites.

Sites where prehistoric archaeological or paleontological resources, which may contribute to the basic understanding of early cultural or biological development in the region are eligible.

Section 29.2 of the TRPA Code of Ordinances requires the protection of sites, objects, structures, or other resources designated as historic resources or for which designation is pending. Demolition, disturbance, removal, or significant alterations are prohibited unless TRPA has approved a resource protection plan to protect the historic resources. Section 29.2.A requires the resource protection plan to be prepared by a qualified professional and may provide for surface or subsurface recovery of data and artifacts and recordation of structural and other data. Subsection 29.2.B, "Protection During Construction," provides that grading, operation of equipment, or other soil disturbance is prohibited in areas where a designated historic resource is present or could be damaged, except with a TRPA-approved resource protection plan (TRPA 1991).

TRPA Code of Ordinances Section 29.6 addresses projects relating to historic resources. For projects affecting designated historic resources, TRPA may require a report documenting compliance with the standards of Chapter 29, Subsections 29.6.A through 29.6.D, relate to additions to historic structures or adjacent structures or in historic sites or districts; and repair, maintenance, reconstruction, or demolition of historic resources (TRPA 1991).

TRPA Code of Ordinances Section 64.8 addresses the discovery of historic resources during grading activities. This section requires grading to cease and TRPA notification if resources are encountered that appear to be 50 years old or older that have not been accounted for previously pursuant to Section 29.2. TRPA would suspend grading and consult with appropriate local, state, or federal entities to determine the significance of the resource, if any. The property owner is required to provide protection for the materials during the investigation period (TRPA 1991).

Douglas County Master Plan

The Douglas County Master Plan outlines one goal that relates to the management and protection of cultural resources.

Goal 9.01: To preserve Douglas County's historic, cultural, and archaeological resources as physical reminders of the County's past and as unique focal points to shape the County's identity, now and in the future.

Policies applicable to the proposed project and alternatives are as follows:

- ▶ **Policy 9.01.01.** Douglas County shall support, whenever feasible, the preservation of the County's rich cultural heritage, including the establishment of historic districts to protect significant historic properties.
- ▶ **Policy 9.01.02.** Douglas County will cooperate and encourage the development of historical preservation efforts of the towns, the Washoe Tribe, and other entities in the County.
- ▶ **Policy 9.01.07.** Douglas County will coordinate with the Washoe Indian Tribe in the identification and preservation of structures and sites of cultural or archaeological significance. Developments proposed in areas of potential archaeological significance shall be required to conduct an investigation in order to determine whether valuable archaeological remains may be affected by the project.

The following goal and policy have been incorporated into Douglas County’s Master Plan, which takes into consideration the stated objectives of the Washoe Tribe’s Comprehensive Master Plan with respect to issues of common interest in planning.

Goal 4.01: Douglas County should cooperate and work toward the mutual attainment of the goals of each entity’s Master Plan.

- ▶ **Policy 4.01.01.** Douglas County shall continue to coordinate with the Washoe Tribe regarding planning issues and seek formal agreements on land use, services to the Washoe population in Dresslerville and other development, and concurrency of adequate public facilities in the Pine Nut Allotments, economic development, forest and woodlands, water resources, cultural resources, transportation, and other common issues to provide for attainment of Master Plan goals.

4.3.2 AFFECTED ENVIRONMENT

CULTURAL BACKGROUND AND SETTING

Prehistory

The prehistory of the Northern Sierra Front, which includes the Lake Tahoe Basin, has been studied by numerous researchers, among them Heizer and Elsasser (1953); Elsasser (1960, 1978); Elston (1971, 1982, 1986); Elston et al. (1977, 1994, and 1995); Miller and Elston (1979); Ingbar (1994); Moratto (1984), Pendleton et al., (1982), Kuffner (1987), Peterson (1984), Zeier and Elston (1986), Delacorte (1997), McGuire (1997a and 1997b), and Moore and Burke (1992). The cultural chronology of the Sierra Front is summarized in Table 4.3-1.

Table 4.3-1 Cultural Phases in the Central and Northern Sierra			
Phase/Adaptive Strategy	Time Markers	Age (Years B.P.)	Climate
Late Kings Beach/ Late Archaic	Desert Series projectile points, chert cores, utilized flakes and other small chert tools, possibly shallow saucer-shaped house pits	700–150 B.P.	Neoglacial; wet and cool, but with little summer precipitation
Early Kings Beach/ Late Archaic	Rosegate Series points, chert cores, utilized flakes and other small chert tools, hullers, sequin beads, possibly small shallow saucer-shaped house pits	1,300– 700 B.P.	Neoglacial, dry trees growing in former bogs, Periods when Lake Tahoe may not have overflowed
Late Martis/ Middle Archaic	corner-notched and eared points of the Martis and Elko Series; large basalt bifaces	3,000– 1,300 B.P.	Neoglacial; wet but not necessarily cooler, increased summer rain
Early Martis/ Middle Archaic	contracting stem points of the Elko-Martis Series; Steamboat points, large basalt bifaces	5,000– 3,000 B.P.	Beginning of Medithermal; Neoglacial, wet, but not necessarily cooler, increased summer precipitation, Lake Tahoe begins to overflow
Spooner/ Early Archaic	(none defined)	8,000– 4,000 B.P.	Altithermal; generally hot and dry, Lake Tahoe does not overflow for long periods of time
Tahoe Reach/ Pre-Archaic	Great Basin Stemmed Series points	>10,000– 8,000 B.P.	Anathermal; warming trend, climate similar to the present.
Source: Elston et al. (1994:11)			

The earliest documented human presence east of the Sierra Nevada crest, in the nearby western Great Basin, consists of cultural manifestations referred to as the Tahoe Reach Phase (ca. > 10,000–8,000 Before Present [B.P.]) (Elston et al. 1994). This time period is marked by the presence of Great Basin stemmed projectile points with ground margins, bifaces, choppers, and crescent shaped tools. Traditionally, these early peoples (also referred to as Paleo-Indians) were viewed as big-game hunters whose entire lifeway depended on the acquisition of Pleistocene mega-fauna. Archaeological evidence, however, suggests Paleo-Indian technological and subsistence patterns were far more diverse, and the procurement of large game may have been more fortuitous rather than a well-established and culturally-defining activity.

What is referred to as the Archaic Period begins with the appearance of artifact assemblages characteristic of the Spooner Phase (8,000–4,000 B.P.) on the Sierra Nevada and Tahoe Basin landscape (Elston 1971). However, the Phase is poorly defined in that the associated assemblages lack many of the kinds of diagnostic artifacts that are used to differentiate between early Native American cultural manifestations.

Throughout the Archaic period, populations increased, the resource base broadened, and plant food gathering and processing tools became more complex, with new implements and technologies added to existing ones. Flaked stone tools became simpler and smaller than in previous periods and during the Late Archaic the bow and arrow replaced the atlatl (spear-thrower) and dart (Elston 1982:187, 1986). The intensified use of resources and expanded tool kit complexity that is representative of the transition to the Late Archaic is thought to be in response to population pressure, possibly spurred by a hot, dry spell between 1,000 and 2,000 years before present (Elston 1986).

Two basic Archaic settlement patterns for the Great Basin have been proposed: a *dispersed* and a *restricted* pattern (Elston 1982:189). The dispersed pattern was the typical pattern in the more arid regions of the western Great Basin sub-area (central Nevada), where small residential groups frequently selected different winter and base camp sites from year to year to take full advantage of a relatively unpredictable and scarce resource base. The restricted pattern prevailed throughout the Northern Sierra Front between 4,000 and 2,000 B.P. At that time, greater effective moisture provided a resource base that was somewhat more reliable and abundant in relation to population density. In the Middle Archaic, residential groups regularly occupied optimally located sites with access to a suite of subsistence resources. Thus, high-return resources could be procured at low cost, with few residential moves (Elston 1982:196; Zeier and Elston 1986).

Four artifact classes characterize Middle Archaic period sites (Moore and Burke 1992:21). These are large corner-notched and contracting-stem points; large bifacial scrapers; flake tools made on large interior flakes with steep edge angles similar to the bifaces; and expedient graters and perforators. Lithic reduction was generalized and “inefficient”, producing a large amount of waste lithic material (Moore and Burke 1992:21–24). Such patterns of tool production tend to occur when large quantities of raw material are readily available; with easy access to suitable toolstone, there is little need to conserve. Early Martis (which coincides with the Middle Archaic; see Table 4.3-1) winter sites were located in optimal ecological locales with access to a suite of subsistence resources (Elston 1986:141). Within the Truckee Meadows, it appears from the density of diagnostic artifacts that land use intensified during this time period. However, there is no evidence for long-term occupation, but rather base camps that were visited frequently for limited periods of time.

During the Late Martis Phase (3,000–1,300 B.P.) of the Archaic, the difference in Great Basin and California traits seem to form an interface at the crest of the Sierra Nevada. This may be reflective of a cultural and physical barrier that persisted at least throughout the Martis phases (Ataman 1999:10–11), and may have continued into later times, as suggested by research conducted by Deis (1999), who presents evidence for a discontinuity in use of Great Basin projectile point types during the Late Martis/Early Kings Beach Phase transition.

Abrupt technological, settlement, and subsistence changes are seen throughout the area by the end of the Late Martis Phase and these changes may be associated with the emergence of the ethnographic Washoe. Small projectile points, indicating a switch from atlatl to bow and arrow technology, are evident throughout the region.

The corresponding Early Kings Beach Phase (1,300–700 B.P.) is characterized by the appearance of seed hullers and bedrock mortars, apparently associated with a northern population expansion and subsequent exploitation of piñon pines. Technologically, the Kings Beach Phase is marked by a switch to a toolstone-efficient technology centered on the primary use of locally available cherts and sinter. In addition to a shift to small Rosegate arrow points, other diagnostic traits include the production of triangular well-thinned bifaces with large width to thickness ratios produced exclusively on chert. Gravers, common in earlier times, are absent during this period, retouched flakes are rare, and perforators, also common in previous phases, if present, tend to be made on recycled small corner-notched projectile points.

Also during this Kings Beach Phase, there was a more dispersed settlement pattern with less regular occupation of optimal sites, which has been linked to a changing subsistence pattern with progressively greater intensity of exploitation of diverse resources and ecozones (Elston 1982:199). People continued to occupy the old sites, but also began to occupy new sites in less optimal locations (Zeier and Elston 1986:377–379). Either resources were being depleted faster at the old sites, necessitating more frequent moves, or demographic packing filled in the spaces between optimal locations. At the new sites, low ranked resources were used intensively at higher cost. These new site locations may reflect exploitation of piñon which reached its northernmost expansion between 1200 and 710 B.P. (Raven 1990:78).

The Late Kings Beach Phase (700–150 B.P.) is marked by flaked stone assemblages dominated by local cherts, with rare use of basalt and sinter (Elston et al. 1994:18). While Elston et al. (1994) ascribe the beginning of this period with the appearance of small side-notched point types that replace the early corner-notched types, Moore and Burke (1992:23) propose that the corner-notched varieties persist until ca. 500 B.P., which is consistent with evidence presented by Clay (1996). However, Elston et al. (1994:18) state that the evidence presented by Moore and Burke for the persistence of corner-notched points is not compelling. Moore and Burke (1992:37) suggest that the dietary breadth decreases during this phase, and there appears to be a decrease in sites at upper elevations, with increased occupation at lower elevations, particularly along terraces of the Truckee River. It was during the latter decades of this Phase that ethnographic Washoe lifeways changed dramatically in response to the large-scale incursions of Euro-Americans into their traditional territory.

Ethnohistory – The Washoe Tribe

Culturally, the Washoe people are linked to both California and the Great Basin. However, their language is unique being the only non-Numic language group in the Great Basin. Although the Washoe language is commonly classified as a member of the Hokan stock (cf. Shipley 1978), which has ten other branches in California, the relationships among these branches have not been firmly established (Jacobsen 1986:107; Moratto 1984). As a result, there is no firmly established proto-language or corresponding homeland for the Washoe. For this reason, there is no linguistic support for either a California origin or a “formerly widespread Hokan-speaking area in the Great Basin” (Jacobsen 1986:107). Instead, Jacobsen suggests that the Washoe have long occupied their core area as implied by a residue of un-analyzable place names and of apparent older loanwords from the surrounding linguistic stocks. This is consistent with archaeological findings of continuity in settlement location between Martis and Kings Beach Phases (cf. Elston 1971; Zeier and Elston 1986; Moratto 1984:295). The simple placement of occupation and activity sites on the landscape does not, however, confirm a widespread and general hypothesized “cultural continuity between the Martis and Kings Beach Complexes” (Elston 1971).

Washoe core territory extended from Honey Lake on the north to the West Walker River, south of Gardnerville, Nevada on the south, and from the Pine Nut Range, east of Reno to the Sierra crest on the west. Northerner Washoe peoples (*Wel mel ti*) used areas from Eagle Valley north to Honey Lake; southerners (*Hunga lel ti*) occupied the area south of Woodfords; and valley dwellers (*Pau wa lu*) wintered in the Truckee Meadows (Nevers 1976). The project area falls roughly in the center of historic Washoe territory, with primary use by the *Pau wa lu* and *Wel mel ti* (Downs 1966, Nevers 1976, and Stewart 1966).

Historic Washoe population estimates are generally low, from 550 in 1861 to 300–400 in 1900 (d’Azevedo 1966:323), although John Reese, a Carson Valley businessman of the 1850s estimated the Carson Valley Washoe

population at 2,000–3,000 individuals (d’Azevedo 1966:232–324). Washoe subsistence exhibited a pattern of seasonal resource exploitation, relying on extensive knowledge of the environment. Washoe village locations, as most Native American groups in California, varied with the seasons, taking advantage of seasonal resources as they matured. They gathered edible and medicinal plants in early spring, moving to Lake Tahoe to fish and socialize as snow conditions allowed (Table 4.3-2). In summer, family groups also gathered plant foods and hunted in mountain valleys, moving to lower elevations for seed harvests in mid to late summer, when communal rabbit and antelope drives were also held. A major celebration began the pine nut harvest, which began in late summer with the taking of green cones and continued at least through late October, with whole cones or nuts in shells being stored for winter subsistence (Fowler 1986:65). In summer, shelters were temporary, semi-circular brush affairs, while winter homes were more sturdy; consisting of circular bark or wood slab-covered pole frames that were dispersed in groups of two to ten (d’Azevedo 1986).

**Table 4.3-2
General Pattern of Washoe Subsistence**

Subsistence Activity and Major Resource	Resource Location	Season
Gathering plant foods, especially watercress, new grass and tule shoots and bulbs	On meadows or adjacent to valley floor in vicinity of winter camp	Late winter, very early spring
Fishing, spring spawning runs	Especially Lake Tahoe shore and tributaries but also Pyramid Lake, Truckee River, Honey Lake, Long Valley Creek, and probably most other large lakes and streams	Early spring
Gathering waterfowl eggs	Waterfowl nesting areas, lakes, marshes, and streams: valley bottoms	Spring
Hunting waterfowl; drives	Shallow lakes and marshes: valley bottoms	Late spring, early summer
Gathering various plant foods, small stream fishing	Sierran meadows and streams	Late spring, mid-summer
Gathering, concentration on grass and brush seeds	Valley floors and fans	Mid-summer to late summer
Upland bird hunting	Valley floors, fans and mountain foothills	Late summer, early fall
Rabbit drives	Valley floors, fans	Early fall
Gathering pine nuts	Eastern mountains, south of Truckee River	Early to mid-fall
Fishing, fall runs	Recorded for Truckee River and Donner Creek, probably most streams	Late Fall
Deer Hunting	Sierra Nevada, eastern mountains, along game migration trails	Throughout fall and winter
Mountain sheep hunting	Sierra Nevada, eastern mountains	Fall before snows
Antelope drives	Valley floors	Throughout fall
Subsistence on stored seeds and dried meat, shelter for winter	In winter camp on valley margins with topographic relief	Throughout winter

Source: Miller and Elston 1979.

The seasonal Washoe subsistence patterns also affected their social organization and settlement composition. During the winter the Washoe lived in dispersed villages and consumed stored foods gathered by organized groups (e.g. pine nut harvests, game drives). Washoe groups fished together in the spring, but split into small family groups during the summer, occupying forager-type bases and moving from one resource patch to another. The general pattern of Washoe subsistence is presented in Table 4.3-2.

Although traditional lifeways have been largely replaced by present-day economic, social, and political influences, the contemporary Washoe have developed a Comprehensive Land Use Plan (Washoe Tribal Council 1994). It includes goals of reestablishing a political and economic presence in their traditional territory and revitalizing Washoe heritage and cultural knowledge, including the harvest and care of traditional plant resources and the protection of traditional properties in the cultural landscape (Rucks 1996).

Euro-American History

Lake Tahoe was not viewed by Euro-American visitors to the area until 1844, when John C. Fremont first observed it from afar (Gudde 1974). Later that same year, members of the westward-bound Stevens-Murphy-Townsend party were perhaps the first Euro-Americans to venture onto the shore of the lake. The California Gold Rush, centered mainly in the Sierra Nevada foothills, and the subsequent Comstock silver rush a decade later in Nevada, brought people back through the Tahoe Sierra along opposite migration patterns with many would-be miners now heading from California towns and cities in the west to the east. The strategic proximity of the Lake Tahoe Basin to the Mother Lode in California and the Comstock Lode in Nevada promoted related development in lumbering, grazing, transportation, market hunting and fishing, tourism, and urban development. Tahoe's proximity to wood, water, mineral, rangeland, and recreational resources justified the investment of a significant amount of capital and energy into transportation to and through the basin.

In the vicinity of the project site, Martin K. "Friday" Burke formed a partnership with a Mr. Small, acquired the franchise for the western end of a toll road linking the basin with Carson and Washoe Valleys and opened Friday's Station, one of the principal way-stations along Kingsbury Grade, in 1860. The station, once located near present-day U.S. Highway 50 (U.S. 50) between the MontBleu Casino and Kingsbury Grade Road (present-day U.S. Highway 207), was used by the Pony Express between 1860 and 1861, and the Pioneer Stage Line, and Wells Fargo Express. However, upon completion of the Central Pacific Railroad, business at the Station quickly declined (Scott 1957:232, 236, 237). Small became the sole owner in 1871 and later sold the business to John Wales Averill in 1896 when the name was changed to Edgewood (Scott 1957:234, 236, 237). Later in 1898 the land and business was purchased by David Brooks Park (Scott 1957:237).

Discovery of the Comstock Lode in 1859 and the subsequent demand of timber for mine supports, housing, fuel, and industrial structures and buildings created a booming logging industry in the Lake Tahoe Basin. Within a relatively short period of time the hills on the east side of the Carson Range were soon denuded of most commercially-desirable timber and the sawyers soon moved into the Lake Tahoe Basin in search of fresh stands. At the peak of the Comstock period timber cutting and milling, consumption of lumber in the Tahoe region totaled 25 million board feet a year, of which nearly 18 million was used in the nearby mines (Pacific Legacy 2006a). By 1883 it has been estimated (Lord 1883:351; Pacific Legacy 2006a) that more than 600 million board feet of lumber was used in the Comstock mines and two million cords of wood had been burned as fuel.

By the 1870s the industry was dominated by several large firms consisting of Sierra Nevada Wood and Lumber Company, Donner Lumber and Boom Company, and the Pacific Wood, Lumber, and Flume Company. The largest was the Carson and Tahoe Lumber and Fluming Company. As the logging industry in the Lake Tahoe Basin declined, large firms such as the Carson and Tahoe either went out of business or, for a time, engaged in peripheral ventures. The Carson and Tahoe, for example, continued as a real estate venture, selling and leasing large tracts of former timber lands, primarily to ranchers. However, by the late 1940s the company closed its doors for good.

A much smaller logging endeavor, and one situated nearer to the Sierra Colina Village project site, was one associated with property owned by Martin "Friday" Burke of Friday's Station. Following the death of Friday Burke, his widow sold 600+ acres to Gilman Folsom in 1888, and the following year Folsom established a logging camp named Hobart approximately one-half mile north of Friday's Station (Scott 1957:237, 239 and 240). However, Folsom's operation was short lived due to the expansion of companies such as the Carson and Tahoe Lumber and Fluming Company. After enjoying a peak in logging operations in 1893, when two log chutes

ran through the meadow to the lakeshore and a shingle mill was fed by Hobart’s Ditch, the operations diminished to producing only cordwood in 1896, and in 1897 Folsom was forced into bankruptcy (Scott 1957:240–241).

4.3.3 RESEARCH METHODOLOGY

LITERATURE REVIEW

Prior to commencing field investigations of the project site, Pacific Legacy researchers conducted a records search and historic map review at the Nevada State Museum in Carson City, Nevada. The research indicated that nine previous cultural resources surveys had been conducted in, and within ½-mile of the project site (Table 4.3-3). One of these (Zeier 1998) included some acreage situated within the present project site and identified, but did not formally record, the site of SCT-1 (a boulder mortar cup). The Nevada State Museum archives also indicated that no prehistoric or historic-era cultural resources were known to be present within the project site although the record search indicated that five prehistoric sites have been documented in the vicinity of the project site (Table 4.3-4).

Table 4.3-3 Cultural Resources Investigations within the Project Site and Vicinity		
Report Title	Author	Date
<i>Supplemental Cultural Resources Documentation for the Sierra Colina Village EIS, TRPA File Number 2006-0695</i>	M. Taggart	2006
<i>Cultural Resources Monitoring Report: Sierra Colina Village, Douglas County, Nevada</i>	Pacific Legacy	2006
<i>Cultural Resources Inventory and Evaluation Report: Proposed Sierra Colina Village, Douglas County, Nevada</i>	Pacific Legacy	2006
<i>A Class III Cultural Resource Inventory of Approximately Four Acres for the Round Hill GID Project</i>	J. Northrop	2004
<i>An Intensive Inventory of Historic Properties Located in Parcel 07-050-05, Douglas County, Nevada</i>	C. Zeier	1998
<i>Urban Fringe Management Project (Nevada Portion)</i>	S. Dexter	1995
<i>Rabe Interpretive Trail</i>	H. Davis	1993
<i>Burke Creek Rediversion/Restoration Project</i>	J. Perrochet	1992
<i>Addendum to Cultural Resources Inventory of a Proposed 120 KV Transmission Line, Round Hill Substation to Stateline Substation, El Dorado County, California, and Douglas County Nevada</i>	B. Young	1987
<i>Cultural Resources Inventory of a Proposed 120KV Transmission Line, Round Hill Substation to Stateline Substation, El Dorado County, California, and Douglas County, Nevada</i>	B. Young	1987
<i>District II Betterment. O.O. 20727 Widening of U.S. 50 for Left Turn Lane. From M.P. DO 1.12 to 1.28</i>	M. Metcalf	1980
<i>Archaeological Reconnaissance Report 5-19-44: Jennings Property Lake Tahoe Basin Management Unit, South Lake Tahoe</i>	P. Smith	1980
Sources: Pacific Legacy 2006a and b, Taggart 2006 (Appendix K).		

**Table 4.3-4
Cultural Resources Previously Identified within the Project Vicinity**

Resource #	Association	Type	Location (from Sierra Colina)	Reference
26-Do-4	prehistoric	bedrock mortars	Edgewood Golf Course	Heizer, 1953
26-Do-36	prehistoric	lithic artifacts	SW (location not plotted)	Haines, 1958
26-Do-481	prehistoric	lithic artifacts, bedrock mortars	¼ mile NW	Baird, 1992
26-Do-536	prehistoric	bedrock mortars	¼ mile south	Seldomridge and Stearns 1992
26-Do-537	prehistoric	bedrock mortars	½ mile south	Seldomridge and Stearns 1992

Source: Pacific Legacy 2006a

NATIVE AMERICAN CONSULTATION

Pacific Legacy initiated cultural resources consultation concerning the project site with the Washoe Tribe of Nevada and California through a letter sent to the Tribe on February 2, 2006. This letter requested a meeting with the Tribe, which occurred on March 22, 2006. Present at the meeting were Washoe Tribal Elders, Tribe Members, representatives from Pacific Legacy, and Gail Jaquish and Steve Kenninger of Sierra Colina, LLC. Subsequently, Sierra Colina Village project site visits (March 28, June 6, and July 13, 2006) were attended by representatives of the Washoe Tribe and Pacific Legacy. Correspondence from the Washoe Tribe regarding the site visits is included with letters, phone records, and site visit records in Appendix B of the Pacific Legacy Cultural Resources Inventory and Evaluation report (Pacific Legacy 2006a).

FIELD TECHNIQUES

Field survey methods were consistent with the Secretary of the Interior's Standards and Guidelines for Identification of Cultural Resources and Professional Qualifications (National Park Service 1983), and Nevada Bureau of Land Management's (BLM) Cultural Resource Inventory General Guidelines (BLM 1990) and recordation of resources followed the guidelines outlined in Intermountain Antiquities Computer System (IMACS 2001).

Five Pacific Legacy archaeologists performed an intensive cultural resources survey of the project site on June 5 and 6, 2006. The 18-acre parcel was inspected using pedestrian transects spaced approximately three to five meters apart. Ground visibility on the project site ranged from approximately 30% to 70%. Rakes and hoes were used to remove needle cast and leaf litter from on and about all of the bedrock outcrops and boulders within the property with the intention of identifying cultural features such as bedrock mortars and grinding slicks.

Cultural resources were recorded on IMACS forms. Mapping of sites was accomplished with a Trimble Geoplotter XH GPS unit. Scaled feature sketches were drawn in the field using a compass and tape measure. No artifacts were collected, nor were permanent site datums established.

Archaeological monitoring was completed by Pacific Legacy in October of 2006 in support of soil hydrologic and geotechnical studies of the Sierra Colina Village parcel. The geological study required excavation of thirty-three (33) test pits. A staff archaeologist from Pacific Legacy was on-site for the duration of ground disturbing work related to the study. No previously unknown cultural resources were encountered as a result of the soil hydrologic and geotechnical studies (Pacific Legacy 2006b).

An EDAW archaeologist conducted a reconnaissance survey of the project site to confirm the findings of the Pacific Legacy inventory and to determine if any recent changes to the integrity of the documented resources had occurred. EDAW also conducted an intensive inventory of areas to be affected by proposed storm water

management improvements for the related Lake Village Drive Cooperative Storm Water Project that had not been delineated at the time of the Pacific Legacy field investigations. These improvements are proposed to include detention basins, storm drains, rock-lined channels, and sediment traps situated primarily along both sides of Lake Village Drive/Echo Drive from U.S. 50 to immediately adjacent to the Kingsbury Middle School (northeast of the project site).

4.3.4 FINDINGS

The intensive and reconnaissance surveys of the project site identified, analyzed, and documented a total of five cultural resources. These consist of two prehistoric sites, one isolated prehistoric artifact, one isolated historic-era artifact, and a single isolated historic-era feature (Table 4.3-5). One of the resources, prehistoric site SCT-1, was evaluated to determine if it meets the criteria for consideration as a Historic Resource, as defined in Chapter 29 of the TRPA Code of Ordinances. The evaluation concluded that the site does not have the requisite data potential for addressing important research questions and does not qualify as a Historic Resource. Prehistoric site SCT-2 was not evaluated for eligibility as a Historic Resource “due to the fact that its protection will be provided by virtue of its location within the Stream Environmental Zone” (Pacific Legacy 2006a). In addition, the isolated cultural resources fail to meet the Historic Resources criteria as they lack integrity, are not associated with historically significant events, sites, or persons, and they do not embody the distinctive characteristics of a type, period, or method of construction.

A supplemental letter report authored by M. Taggart provides additional information on three topics, as requested by TRPA in October 2006 (Taggart 2006). The letter report to TRPA provides a detailed discussion of milling technology in the Sierra Nevada, consideration of the antiquity of site SCT-1 and SCT-2, and an expanded historic context for the Sierra Colina property, including the ditch segment.

Resource #	Association	Type	Historic Resource Status*
SCT-1	prehistoric	boulder mortar cups	not eligible
SCT-2	prehistoric	boulder mortar cup	unevaluated**
ISO-1	historic-era	apothecary bottle, ca. 1890	not eligible
ISO-2	prehistoric	granitic pestle fragment	not eligible
ISO-3	historic-era	ditch segment	not eligible

*Historic Resource Status per TRPA Code Section 29.5.E
 **SCT-2 was not evaluated since its protection during construction will be provided by virtue of being situated inside the site SEZ at a location which is not impacted by any of the development proposed in any Alternative.
 Source: Pacific Legacy 2006a

While sites SCT-1 and SCT-2 appear to retain integrity, the other resources do not. The ditch (ISO-3) is a small fragment of a water conveyance system that has either been completely obliterated outside of the 180 ft. segment remaining on the Sierra Colina property, resulting in a loss of integrity, or the ditch segments represents an unfinished system that was quickly abandoned. Although no physical evidence supports the presence of a larger system in the area, if it had been constructed, the obliteration of the vast majority of the system has severely compromised the integrity of its design, setting, materials, feeling, and association (Taggart 2006). The two isolated finds (apothecary bottle and pestle fragment) have lost their contextual associations and settings, and have likely been displaced from the location of their primary deposition. As such, the remaining two isolates (apothecary bottle and pestle fragment) do not retain integrity.

Subsurface excavations undertaken at SCT-1 confirmed the absence of a buried component or other features that could provide important scientific information regarding early Native American occupation and activities within the Lake Tahoe Basin and surrounding region. Site SCT-2 has not been subjected to subsurface examination, yet it is unlikely that the resource contains a buried component considering the extremely shallow nature of the surrounding soil immediately adjacent to the outcrop feature located inside the SEZ. None of the historic-era isolated resources can be linked to any significant individuals or events with implications for regional, state, or national patterns of history. In addition, the ditch segment (ISO-3) does not exhibit features or traits that mark it as the work of a master builder, as having artistic values, or as it the best or earliest of its kind as detailed further in the Pacific Legacy Cultural Resources Documentation (Taggart 2006).

Based on intensive and reconnaissance archaeological surveys, subsurface testing, and archival research, Pacific Legacy and EDAW recommended that none of the prehistoric or historic-era cultural resources noted within the project site are considered significant per the TRPA Code of Ordinances. EDAW consulted with the Nevada State Historic Preservation Officer (SHPO) and requested concurrence with the Pacific Legacy and EDAW findings. In a letter to EDAW dated November 8, 2007, Nevada SHPO concurred with these recommendations (Appendix K).

PALEONTOLOGICAL SETTING

A review of the *Geologic Map of the Lake Tahoe Basin* (Saucedo 2005) indicates that the project site is located within an area of Pleistocene-age (11,000 to 1.8 million years before present) lacustrine terrace deposits on the western part of the site, and within Cretaceous-age (144 to 205 million years before present) granodiorite of the Kingsbury Grade on the remainder of the site.

The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates are generally common; the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare.

A review of the U.C. Berkeley Museum of Paleontology (UCMP) database indicates there are no recorded fossil sites in the vicinity of the project site. Because the granodiorite of the Kingsbury Grade formed under conditions of high temperature and pressure beneath the earth's surface, this rock formation would not contain paleontological resources. The UCMP database does not indicate any recorded vertebrate fossil localities within the Pleistocene lacustrine terrace deposits surrounding Lake Tahoe.

4.3.5 ENVIRONMENTAL CONSEQUENCES AND RECOMMENDED MITIGATION MEASURES

CRITERIA OF SIGNIFICANCE

TRPA Criteria

The Goals and Policies found in the TRPA's Regional Plan for the Lake Tahoe Basin (TRPA 1986) provide for the identification and preservation of culturally and historically significant sites in the Lake Tahoe Basin. Section 29.5 of the TRPA Code of Ordinances codifies these goals, providing regulations for the recognition, protection, and preservation of the region's significant historical, archaeological, and paleontological resources, and setting standards for resource protection, discovery, evaluation, and management. Section 29.2 of the Code of Ordinances prohibits demolition, disturbance, removal, or significant alteration of designated historic resources, unless TRPA has approved a resource protection plan for the resources. Section 64.8 of the Code of Ordinances also requires protection of previously unaccounted historic resources 50 years old or older discovered during grading activities.

SIGNIFICANCE THRESHOLDS

Based upon the goals and policies of the TRPA and the Douglas County Master Plan and consistent with those goals and policies, implementation of the Sierra Colina Village Project would have a significant effect if it would:

- ▶ cause a substantial adverse change in the significance of a historical resource;
- ▶ cause a substantial adverse change in the significance of an archaeological resource;
- ▶ directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- ▶ disturb any human remains, including those interred outside of formal cemeteries.

In addition, an adverse change to a historical resource or important archaeological resource is considered to be significant if the following would result from implementing the project: physical demolition, destruction, or alteration of the resource or its immediate surroundings such that the significance of a designated historical resource would be materially altered or otherwise impaired.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – Proposed Project

IMPACT **Effects on Known Significant Archaeological and Historical Resources.** *No archaeological or historical resources inventoried on the project site are significant according to TRPA criteria. Therefore, Alternative 1 would not adversely affect any known significant archaeological or historical resources. This impact is less than significant.*

4.3.1-1

No archaeological or historical resources inventoried on the project site are significant according to TRPA criteria. Therefore, Alternative 1 would have no effect on any known significant cultural site, feature, or artifact. All potentially significant information has been recovered with the completion of the cultural inventory report, and no further research or project constraints are necessary. This impact is **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT **Effects on Previously Undiscovered Archaeological and Historical Resources or Human Remains.** *Although the archaeological survey and literature search did not identify any significant prehistoric or historic-era resources on the project site, it is possible that buried or concealed prehistoric or historic-era sites, features, artifacts, or human interments could be present and encountered during ground-disturbing activities. If previously undiscovered archaeological or historical resources become disturbed during construction, this could be a significant impact.*

4.3.1-2

Archival research, Native American consultation, and an intensive field inventory conducted on the project site identified no significant prehistoric or historic-era sites, features, artifacts, human remains, or areas of concern in the project area. Site excavation by Zeier in 1998 and cultural resources monitoring by Pacific Legacy in 2006 during soil hydrologic and geotechnical subsurface borings both resulted in no identification of sub-surface cultural artifacts. However, based on the presence of prehistoric and historic-era human activity in the project vicinity, the potential exists for undocumented cultural resources or human remains to be unearthed during construction. If previously undiscovered archaeological or historical resources or human remains become disturbed by construction, this could be a **significant** impact.

Mitigation Measure 4.3.1-2. Previously Undiscovered Archaeological and Historical Resources and Human Remains. If previously unknown archaeological or historical resources or human remains are discovered during any project-related ground-disturbing activities, the construction crew shall immediately cease ground-disturbing activities in the vicinity of the find. A qualified archaeologist approved by TRPA and Douglas County shall be consulted to evaluate the resource in accordance with TRPA and County guidelines. Mitigation, subject to approval by TRPA and the County, shall be implemented before ground-disturbing work in the area of the resource find can continue.

The State of Nevada Revised Statutes (NRS) Section 383.170 requires a person to report to the Office of Historic Preservation immediately upon discovery of a previously unreported Native American interment inadvertently disturbed by ground-disturbing activities such as construction, logging, or farming. The Office of Historic Preservation must consult immediately with the Nevada Indian Commission and notify the appropriate Indian tribe. The authorized tribe or their representative, with the permission of the landowner, may inspect the burial site and recommend an appropriate means for the treatment and disposition of the site and all associated artifacts and human remains. If the burial site is located on private land, Section 383.170 allows, at the owner's expense, the re-interment of all human remains and associated artifacts in a location not subject to further disturbance if the Indian tribe fails to make a recommendation within forty-eight hours after it receives notification of the find or if the landowner rejects the recommendation and mediation conducted pursuant to NRS 383.160 fails to provide measures acceptable to the landowner.

Implementation of Mitigation Measure 4.3.1-2 would reduce the impact to a **less-than-significant** level.

IMPACT 4.3.1-3 **Effects on Paleontological Resources.** *The project site is located within an area of Pleistocene-age lacustrine terrace deposits on the western part of the site, and within Cretaceous-age granodiorite of the Kingsbury Grade on the remainder of the site. Marine invertebrates may occur in the lacustrine terrace deposits; however, these types of fossils are generally not considered to be a unique paleontological resource. Therefore, project-related construction activities would have a less-than-significant impact on unique, scientifically-important paleontological resources.*

Geologic mapping indicates that the project site is located within an area of Pleistocene-age lacustrine terrace deposits on the western part of the site, and within Cretaceous-age granodiorite of the Kingsbury Grade on the remainder of the site. While the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. The UCMP database indicates there are no recorded fossil sites in the vicinity of the project site.

Therefore, project-related construction (ground-disturbing) activities would have a **less-than-significant** impact on unique, scientifically-important paleontological resources.

Mitigation Measures

No mitigation is required.

Alternative 2 – Grand Private Estate

IMPACT 4.3.2-1 **Effects on Known Significant Archaeological and Historical Resources.** *This impact is the same as Impact 4.3.1-1 described above for Alternative 1. No cultural resources documented on the project site are significant according to TRPA criteria. Therefore, Alternative 2 would not adversely affect any known significant archaeological or historical resources. This impact is less than significant.*

This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

Alternative 2 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-1, there are no known significant archaeological or historical resources on the project site. This impact is **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.3.2-2 **Effects on Previously Undiscovered Archaeological and Historical Resources and Human Remains.** *This impact is the same as Impact 4.3.1-2 described above for Alternative 1. Although the archaeological survey and literature search did not identify any significant archaeological or historical resources or human remains on the project site, it is possible that buried or concealed prehistoric or historic-era sites, features, artifacts, or human interments could be present and encountered during ground-disturbing activities. If previously undiscovered cultural resources or human remains become disturbed during construction, this could be a **significant** impact.*

This impact is the same as Impact 4.3.1-2 described above for Alternative 1. See full discussion above.

As discussed under Impact 4.3.1-2, the potential exists for undocumented cultural resources or human remains to be unearthed during construction of Alternative 2. If previously undiscovered archaeological or historical resources or human remains become disturbed by construction, this could be a **significant** impact.

Mitigation Measure 4.3.2-2. Mitigate Impacts to Previously Undiscovered Cultural Resources. See Mitigation Measure 4.3.1-2 described above for Alternative 1. The same mitigation would apply.

Implementation of Mitigation Measure 4.3.2-2 would reduce the potential impacts to undiscovered cultural resources associated with Alternative 2 to a **less-than-significant** level.

IMPACT 4.3.2-3 **Effects on Paleontological Resources.** *This impact is the same as Impact 4.3.1-3 described above for Alternative 1. While the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. Alternative 2 would have a **less-than-significant** impact on unique, scientifically-important paleontological resources.*

This impact is the same as Impact 4.3.1-3 described above for Alternative 1. See full discussion above.

Alternative 2 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-3, while the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. The UCMP database indicates there are no recorded fossil sites in the vicinity of the project site. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Alternative 3 – Reduced Density Alternative

IMPACT 4.3.3-1 **Effects on Known Significant Archaeological and Historical Resources.** *This impact is the same as Impact 4.3.1-1 described above for Alternative 1. No cultural resources documented on the project site are significant according to TRPA criteria. Therefore, Alternative 3 would not adversely affect any known significant archaeological or historical resources. This impact is **less than significant**.*

This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

Alternative 3 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-1, there are no known significant archaeological or historical resources on the project site. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.3.3-2 **Effects on Previously Undiscovered Archaeological and Historical Resources and Human Remains.** *This impact is the same as Impact 4.3.1-2 described above for Alternative 1. Although the archaeological survey and literature search did not identify any significant archaeological or historical resources or human remains on the project site, it is possible that buried or concealed prehistoric or historic-era sites, features, artifacts, or human interments could be present and encountered during ground-disturbing activities. If previously undiscovered, cultural resources or human remains are disturbed during construction, this could be a **significant** impact.*

This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

As discussed under Impact 4.3.1-2, the potential exists for undocumented cultural resources or human remains to be unearthed during construction of Alternative 3. If archaeological or historical resources or human remains become disturbed by construction, this could be a **significant** impact.

Mitigation Measure 4.3.3-2. Mitigate Impacts to Previously Undiscovered Cultural Resources. See Mitigation Measure 4.3.1-2 described above for Alternative 1. The same mitigation would apply.

Implementation of Mitigation Measure 4.3.3-2 would reduce the potential impacts to undiscovered cultural resources associated with Alternative 3 to a **less-than-significant** level.

IMPACT 4.3.3-3 **Effects on Paleontological Resources.** *This impact is the same as Impact 4.3.1-3 described above for Alternative 1. While the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. Alternative 3 would have a **less-than-significant** impact on unique, scientifically-important paleontological resources.*

This impact would be the same under Alternative 3 as Impact 4.3.1-3 described above for Alternative 1. This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

Alternative 3 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-3, while the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. The UCMP database indicates there are no recorded fossil sites in the vicinity of the project site. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Alternative 4 – Increased Density Alternative

IMPACT 4.3.4-1 Effects on Known Significant Archaeological and Historical Resources. *This impact is the same as Impact 4.3.1-1 described above for Alternative 1. No cultural resources documented on the project site are significant according to TRPA criteria. Therefore, Alternative 4 would not adversely affect any known significant archaeological or historical resources. This impact is less than significant.*

This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

Alternative 4 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-1, there are no known significant archaeological or historical resources on the project site. This impact is **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.3.4-2 Effects on Previously Undiscovered Archaeological and Historical Resources and Human Remains. *This impact is the same as Impact 4.3.1-2 described above for Alternative 1. Although the archaeological survey and literature search did not identify any significant archaeological or historical resources or human remains on the project site, it is possible that buried or concealed prehistoric or historic-era sites, features, artifacts, or human interments could be present and encountered during ground-disturbing activities. If previously undiscovered, cultural resources or human remains become disturbed during construction, this could be a significant impact.*

This impact is the same as Impact 4.3.1-1 described above for Alternative 1. See full discussion above.

As discussed under Impact 4.3.1-2, the potential exists for undocumented cultural resources or human remains to be unearthed during construction of Alternative 4. If previously unknown archaeological or historical resources or human remains become disturbed by construction, this could be a **significant** impact.

Mitigation Measure 4.3.4-2. Mitigate Previously Undiscovered Cultural Resources. See Mitigation Measure 4.3.1-2 described above for Alternative 1. The same mitigation would apply.

Implementation of Mitigation Measure 4.3.4-2 would reduce the potential impacts to undiscovered cultural resources associated with Alternative 4 to a **less-than-significant** level.

IMPACT 4.3.4-3 Effects on Paleontological Resources. *This impact is the same as Impact 4.3.1-3 described above for Alternative 1. While the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. Alternative 2 would have a less-than-significant impact on unique, scientifically-important paleontological resources.*

This impact would be the same under Alternative 4 as Impact 4.3.1-3 described above for Alternative 1. See full discussion above.

Alternative 4 would occur on the same project site as Alternative 1. As discussed under Impact 4.3.1-3, while the lacustrine terrace deposits on the western part of the site may contain marine invertebrate fossils, these types of fossils are common and generally not considered to be a unique paleontological resource. The UCMP database indicates there are no recorded fossil sites in the vicinity of the project site. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Alternative 5 – No Project

IMPACT 4.3.5-1 **Effects on Known Significant Archaeological and Historical Resources.** *With no ground-disturbing activities occurring under Alternative 5, there would be **no impacts** from construction to the integrity of previously documented prehistoric or historic-era cultural resources that might be present on the project site.*

Under Alternative 5, there would be no changes from construction to existing conditions on the project site. With no construction related ground-disturbing activities occurring under this alternative, there would be **no impact** to the integrity of previously documented prehistoric or historic-era cultural resources that might be present on the project site.

Mitigation Measures

No mitigation is required.

IMPACT 4.3.5-2 **Effects on Previously Undiscovered Archaeological and Historical Resources and Human Remains.** *With no ground-disturbing activities occurring under Alternative 5, there would be **no impacts** from construction to the integrity of presently unrecorded prehistoric or historic-era cultural resources that might be present on the project site.*

Under Alternative 5, there would be no changes from construction to existing conditions on the project site. With no construction related ground-disturbing activities occurring under this alternative, there would be **no impact** to the integrity of presently unrecorded prehistoric or historic-era cultural resources that might be present on the project site.

Mitigation Measures

No mitigation is required.

IMPACT 4.3.5-3 **Effects on Paleontological Resources.** *With no ground-disturbing activities occurring under Alternative 5, there would be **no impacts** to any paleontological resources that might be present on the project site.*

Under Alternative 5, there would be no changes from construction to existing conditions on the project site. With no construction related ground-disturbing activities occurring under this alternative, there would be **no impacts** to any paleontological resources that might be present on the project site.

Mitigation Measures

No mitigation is required.