
4.4 - Cultural Resources

4.4.1 - Introduction

This section describes the existing cultural resources and potential effects from project implementation on the site and its surrounding area that are based on a Phase I Cultural Resource Assessment performed by MBA in July 2008 which updated the study prepared by Christopher Drover, Ph.D. in 1989 for the previous Paradise Hills project. The results of these assessments are presented in this section and included in Appendix D.

A paleontological survey and assessment for the proposed property was conducted by Heritage Resource Consultants in December of 1990. The survey indicated that the property was not previously surveyed for paleontological resources. There is no record of paleontological resources on or immediately adjacent to the study property. However, the Potato Formation and the Pleistocene Older Alluvium have yielded plant and vertebrate fossils and are considered to be paleontologically sensitive. There is a possibility that Rancholabrean animal fossils may be discovered in the sediments on the study property, even though no fossils were observed in outcrops on the study property during the survey. Although, paleobiological remains may occur in these sediments, as they may in any other sediment, the likelihood of any being recovered from the proposed property is minimal. No fossils or sub-fossils were recorded from the alluvium in the region. Since there is a possibility that significant paleontological resources may be impacted if grading occurs on the property, mitigation was recommended.

As explained in Section 1, Introduction, where applicable, this project-level DEIR incorporates by reference information and analysis contained in the City of San Bernardino General Plan EIR and the Paradise Hills Specific Plan EIR, certified by the San Bernardino City Mayor and Common Council in 2005 and 1993, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on cultural resources were less than significant after mitigation. The Paradise Hills EIR provided project-level analysis of the smaller Paradise Hills project and scoped out the cultural resources topical area and its associated issues as effects found not to be significant.

This DEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIR and changes that have increased the size and intensity of the Proposed Project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the Proposed Project, and new analysis is provided for potential impacts not previously considered in those documents.

4.4.2 - Environmental Setting

Overview

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

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

Regional Cultural Setting

Prehistory

The general vicinity exhibits archaeological evidence of extensive cultural activity, intermittent occupations, and an increasing level of complexity and technological development over time. Although temporal prehistoric traditions vary greatly according to location, a brief overview of prehistoric cultural development for the California desert can be characterized in four stages:

- Desert Culture (12000 to 10000 B.C.);
- Western Hunting Culture or Lake Mohave Period (~9000 to 5000 B.C.);
- Pinto Period (5000 to 2500 B.C.); and
- Protohistoric (2500 B.C. to A.D. 1769).

Desert Culture Period (12000 to 10000 BC). Comparatively, little is known of Paleo-Indian peoples in the California archaeological record, although highly documented archaeological village sites in the Southwest have revealed associated bones of now extinct large mammals, as well as Clovis and Folsom tool traditions (Fagan 2000). However, this period is noted for an increase in drier weather, consequently most of the known California Late Paleo-Indian/early Archaic sites are located near extinct desert valley lakes, rock shelters and on the Channel Islands off the coast. These consist of occupation sites, butchering stations and burials. This period ends with a marked extinction of large game native to North America and a distinct change in prehistoric tool kits used to prepare plant foods. Small projectile points, choppers, flat scrapers, drills, and digging sticks are also common.

Western Hunting Culture or Lake Mohave Period (~9000 to 5000 BC). It is thought that as the hunting of large mammals became less available as a food resource due to drier weather conditions, the west and southwest shows an increased reliance in using small game, such as squirrels and rabbits and wild plants to sustain the small tribal bands. This period is also marked by the absence of food grinding stone implements. However, the period ends when stone grinding implements become increasingly more prevalent in the archaeological record.

Pinto Period (5000 to 2500 BC). This period highlights a combination of both Desert Culture and Western Hunting Cultures, where an increase in grinding tools appears in the archaeological record.

Such tools suggest an increased level of reliance on wild plants and small animals. The Pinto spear-point tool tradition is the hallmark of this period. This tradition is characterized by small coarsely chipped points, which tend to be triangular and sometimes are found with parallel sides. These points may have tipped the atlatl. A slight variation in tool type appears towards the end of this period, which is represented by Gypsum points and Elko points. The Gypsum point is typified by its contracting stem, whereas Elko points are corner notched.

Protohistoric (2500 B.C. to A.D. 1769). In the southwestern Great Basin, this period is characterized as having cooler and wetter conditions than that previously experienced, an environment similar to that of today. Sites appear in previously unoccupied areas of California. The numbers of sites in some regions, especially near ephemeral lakes, seem to have risen dramatically. In the Owens Valley, permanent village sites were utilized, along with the addition of upland dry-environment sites. These changes reflect a phenomenon found throughout the western United States where an increase in population and changes in tool kits and living arrangements resulted in more specialized uses of materials and landscapes. Diagnostic artifacts associated with this period consist of Elko and Gypsum projectile points.

Native American Tribes

The project area is located in the far easternmost section of the traditional Gabrielino culture area, near the far western border of the Cahuilla traditional use-areas and in the southernmost portion of the Serrano culture area.

Gabrielino. The project area lies in an area utilized by the Gabrielino, which form the primary historical sources for this group. By about A.D. 1200, peoples known as the Kukamongan were clustered around a large hill (Red Hill) located west of Alta Loma. The arrival of Spanish explorers and the establishment of missions and outposts during the 18th century ended the prehistoric period in California and, due to the introduction of diseases such as smallpox and mass removal of local Indian groups to Mission San Gabriel and Mission San Juan Capistrano, Gabrielino society began to fragment. The project area lies along the far eastern edge of an area generally thought to have been utilized by Native Americans that were once associated with the Mission San Gabriel (Bean and Vane 1979). Indigenous native culture was forever modified after the arrival of the Spanish soldiers. Bean and Smith (1978) characterize the area as the “Interior Mountains/Adjacent Foothills” zone of the Gabrielino culture. The arrival of Spanish explorers and the establishment of missions and outposts during the 18th century ended the prehistoric period in California.

The Gabrielino occupied the majority of the Los Angeles basin in Los Angeles and Orange counties. Their territory included the watersheds of the San Gabriel, Santa Ana, and Los Angeles rivers, and several of the smaller streams of the Santa Monica Mountains and Santa Ana Mountains. They also inhabited the offshore islands of Santa Catalina, San Clemente, and San Nicolas. Although the Gabrielino inhabited a large territory, in many ways, they are considered among the least known of all Native Californians. This is partially attributed to their location in the present day Los Angeles

County where they were quickly assimilated into the nearby missions and European culture (Bean and Smith 1978). The Gabrielino spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin. The total Gabrielino population at about 1770 A.D. was roughly 5,000 people, based on an estimate of 100 small villages of 50 to 200 people.

Their range is generally thought to have been on the Pacific coast from Malibu to San Pedro Bay and south to Aliso Creek, then east to Temescal Canyon, then north to the headwaters of the San Gabriel River. Also included were several islands, including Catalina. This large area encompasses the city of Los Angeles, much of Rancho Cucamonga, Corona, Glendale, and Long Beach. By 1800, most Gabrielinos either had been killed or were affiliated with the Missions. Gabrielino population estimates are difficult to reconstruct, but are thought to have ranged into the thousands with as many as 50 to 100 villages occupied at one time. Spanish documents estimate village population size between 50 and 200 inhabitants.

Cahuilla. The Cahuilla Indians occupied lands due east of the Santa Ana River prior to contact with Spanish Mission padres and military personnel, which places the project area near the western edge of their traditional use areas. Currently, it is thought that a migration of Shoshonean peoples from the Great Basin occurred approximately 1,000 to 600 years ago, with populations moving into much of desert and coastal Southern California. Included among these migrants were the forbearers to the modern Cahuilla. The Cahuilla spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin. The prehistoric Cahuilla were characterized by the occupation of sedentary villages in subsistence territories that permitted them to reach the majority of their resources within a day's walk. Villages were commonly located near reliable sources of water. From October to November, much of the village population moved to temporary camps in the mountains to harvest acorns and hunt game. Inland groups also had fishing and gathering spots on the coast that they visited annually. In comparison with the Gabrielino and Luiseño, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla patterns may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers or padres to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978).

Serrano. The project area lies near the southern edge of an area utilized by the Serrano. The Spanish decimated all indigenous groups adjacent to the eastern San Bernardino Mountains, especially after a Spanish outpost was built in Redlands in 1819, but some Serrano survived intact for many years in the far eastern San Bernardino mountains due to the ruggedness of the terrain and the dispersed population. It is believed that Serrano families inhabited the Guachama Ranchería in the early 1800s. This village was also known as Politana and apparently housed the Rancho San Bernardino Estancia after about 1819. The Serrano spoke a language that belongs to the Cupan group of the Takic subfamily. The Takic subfamily is part of the larger Uto-Aztecan language family, which includes

the Shoshonean groups of the Great Basin. The total Serrano population at contact was roughly 2,000 people. Their range is generally thought to have been located in and east of the Cajon Pass area of the San Bernardino Mountains, north of Yucaipa, west of Twenty-nine Palms and south of Victorville. The range of this group was limited and restricted by reliable water.

Serrano populations studied in the early part of the last century were a remnant of their cultural form prior to contact with the Spanish Missionaries. Nonetheless, the Serrano are viewed as clan and moiety-oriented or local lineage-oriented group tied to traditional territories or use-areas. Typically, a “village” consisted of a collection of families centered about a ceremonial house, with individual families inhabiting willow-framed huts with tule thatching. Considered hunter-gatherers, Serrano exhibited a sophisticated technology devoted to hunting small animals and gathering roots, tubers and seeds of various kinds. Today, Serrano descendants are found mostly on the Morongo and San Manuel reservations.

Historic Background

The Spanish Period (1769 to 1821)

Father Junipero Serra was sent to Alta California to create a chain of Missions and Mission outposts to bring Christianity to the indigenous population, and create a foundation for colonization of the region. Located between the previously established presidios in Monterey and San Diego, Serra had military assistance in his quest and the San Bernardino area came under the early control of Spanish soldier Pedro Fages and Father Francisco Garcés. According to Juan Caballeria (1902 in Lugo 1950), on May 20, 1810, Father Francisco Dumetz founded and performed a ceremony to consecrate a new Mission San Gabriel supply station, including a chapel, at the Guachama Ranchería. This was an existing native village near the mouth of San Timoteo Canyon. According to Harley (1988 and 1989), it is likely that Dumetz never made this trip and that Caballeria, who was the keeper of Mission San Gabriel history at the time, had fabricated much of the story.

The Mexican Rancho Period (1824 to 1848)

Administration of the southern California ranchos shifted to Mexican hands about 1824, but effective control did not occur until the early 1830s. Once the ranchos were secularized, the Mexican administrators began granting vast tracts of the original Mission properties to members of prominent families whom had helped cut ties from the Spanish system. In 1842, title to the Mission San Gabriel’s outpost in this area, the Rancho San Bernardino, was granted to Jose del Carmen Lugo, Jose Maria Lugo, Vincente Lugo, and their cousin Diego Sepulveda by Manuel Micheltoarena, Governor of California. The remaining Native Americans that were supported by the Missions were left to fend for themselves.

During the transitional period from 1824 to the early 1830s, construction began on new adobe buildings (SBR-2307/H) associated with the outpost on the Rancho, which by this time had begun cattle operations in the valley. The location of this new Spanish site, now known as the San Bernardino Asistencia, is found on a low finger ridge about 1,000 feet south of the zanja, and

2,500 feet north of San Timoteo Canyon. At the time, San Timoteo Canyon was a well-known route of travel between Sonora and San Gabriel, and had been utilized by Indian traders. The originally planned asistencia was abandoned for a decade or so when the new Mexican land grantees, Don Lugo and family, moved into the asistencia and made it their permanent home. Lugo expanded his cattle operations and made use of the old zanja such that property along most of the length of the zanja could be used as cropland.

Because Indians often attacked the northern part of the Rancho San Bernardino to steal horses and cattle, Governor Micheltorena granted about a league of land, known as the Rancho Muscupiabe, to Miguel Blanco. According to the Hancock survey of 1867, this small rancho was centered in Township 1 North, Range 5 West and Township 1 North, Range 4 West, to the north of the San Bernardino Rancho, which was once Agua Caliente. This Rancho encompasses this project area, Township 1 North, Range 4 West/Lot 38 and Township 1 North, Range 5 West Lot 37, and depicts a house in the eastern most portion of Lot 38. Blanco then proceeded to construct a large house near the mouth of Cable Creek for his wife and six children, built corrals, and planted crops. The establishment of the Blanco outpost was meant to discourage Piutes from north of Cajon Pass, from raiding the San Bernardino area. The Piute territory was centered near the California-Nevada border, but because the old Mojave Road ran through their area and into the Santa Ana River Valley periphery, the outskirts of the Spanish and Mexican settlements were occasionally attacked. Unfortunately, for Blanco, the Indians stole all of his horses and cattle, and he was forced to abandon the outpost and move to the asistencia. In the 1850s, after the territory was ceded to the United States, land tribunals restored the property to Blanco for a short period of time.

American Settlement Period (1848 to 1885)

Although California shifted into American hands, exploitation of the area was slow to develop. In 1851, Mormon immigrants began arriving in the area and began purchasing the majority of the Rancho from the Lugo family. The Mormons stopped at the Glen Helen Park area, also known as Sycamore Grove, and rested while elders sought out the Lugos to negotiate a price for the rancho. Once purchased, Mormon Bishop Tenney replaced Lugo at the asistencia, which served as a school and tithing house. Mormon agricultural fields along the zanja were the only irrigated croplands in the entire valley. After the Mormons returned to Salt Lake in 1857, their properties were sold off to the slow influx of ranchers and farmers.

The project area site has been historically vacant and only improvements on the site were related to the Circle K Nudist Camp located on east bank of Badger Creek and remnants of its foundations, pools, etc. can still be seen onsite.

Project Site

The Proposed Project site contains Badger Creek and its associated canyon, and likely supported occasional use by various Native American groups. The cultural resource survey conducted for the Paradise Hills project found no cultural resources on the site. This may be due to the repeated

disturbance experience by flooding along Badger Creek, repeated brush fires on the slopes supporting native vegetation, and the long history of alluvial deposition on the project site from runoff out of the mountains to the north. In addition, the site was extensively disturbed by the Old Fire in 2003 and six seismic trenches were dug across the site in a north-south direction to locate the San Andreas Fault as it crosses the site from northwest to southeast. For these reasons, the site is not considered to contain significant cultural resources at this time.

The project site contains two potential historical resources. The first is the remnant foundations, pool, walls, and landscaping of the Circle K “nudist” camp located in the central portion of the site along the east bank of Badger Creek. A records search by MBA revealed little in the way of historical data on this facility. It appears the remnant foundations and walls may be related to the J.W. Marshall homestead and farm that was located in this area in the early part of the last century (page 2, MBA 2007). This area is planned for permanent open space as part of the CSUSB “land laboratory” and so the remnant foundations and walls will not be impacted by development.

The Phase 1 cultural survey by MBA also found remnant building walls in the area between Planning Areas 18 and 20. While this area is actually “not a part” of the Project site, it is planned for a road that will help provide access to the site from Little Mountain Drive. Development of the project site will require the removal of this resource.

Paleontological Resources

The following assessment of potential paleontological resources of the project site and surrounding area is taken from the PHSP EIR section (pages 192-195) that in turn summarized the 1990 survey conducted by Heritage Resource Consultants:

The study area is located on the eastside of the lower Cajon Wash, north of the Shandin Hills. The property straddles the point where the edge of the San Bernardino Mountains dips below the alluvial deposits which fill the valley of the Santa Ana River and its tributaries... The northeastern part of the property which is comprised of Badger Canyon and the western slopes of the San Bernardino Mountain Range includes Igneous and metamorphic rocks. These are covered by coarse sedimentary deposits which fill the valley forming its central meadow. The valley fill is comprised of angular cobble to boulder-sized clasts with coarse pebbly sands, which cover the surface. The southwestern part of the property is covered by the alluvial fan emanating from the mouth of Badger Canyon. There are remnants of older terrace deposits along the foot of the mountain slopes at the upper edge of the fan in the northwestern part of the property. The metasediments which form Badger Hill probably underlay at least part of the study property. The natural rock units are exposed in numerous outcrops and road cuts throughout the property. The igneous rocks are part of the Pre-Cambrian Igneous Complex, predominantly composed of light colored granitics. These are characterized as Pre-Cambrian, but may be younger. These are overlain by meta-limestone/dolomite deposits of the Paleozoic Marine Sedimentary and Metasedimentary Complex found throughout much of the region.

A small portion of the property contains Tertiary sediments now assigned to the Potato Formation. These sediments are located on the hillside southeast of the mouth of Badger Canyon. They extend along the hillside to the property boundary and beyond. Fossil plants from this formation indicate that it is Late Miocene in age, perhaps belonging to the Clarendonian (Land Mammal Age).

The Quaternary terrace and alluvium are relatively flat lying sediments and deeply weathered gravels described as older alluvium. The Older Alluvium can be divided into three subunits. These include deposits perched in the hillsides adjacent to Badger Canyon, the fan deposits at the mouth of Badger Canyon and valley fill which outcrops in the western part of the property, and at the edge of the fan deposits in the southern part of the property.

The sediments in the different subunits of Older Alluvium are all relatively similar, being derived mostly from the San Bernardino Mountains. The terrace deposits which are part of the valley fill are considered to have been deposited during the Pleistocene age and are believed to be about 50,000 years old. Most of the rest of the Older Alluvium, except the perched deposits, is probably similar in age. The sediments in the Older Alluvium on the property consist of brown to reddish silty sands with pebble to boulder-sized clasts. Many of the larger clasts are derived from local sources. The alluvium consists of sands, gravel, and larger clasts of igneous and metasedimentary rocks derived from Badger Canyon and adjacent slopes. Most of the alluvium is unconsolidated with clasts varying from subangular to rounded. The Badger Canyon creek bed and its subsidiary channels contain Recent Alluvium.

The search of the paleontological literature, and the records which are held by the San Bernardino County Museum (Reynolds 1990) indicated that the property had not been previously surveyed for paleontological resources. There was no record of paleontological resources on or immediately adjacent to the study property. However, the Potato Formation and the Pleistocene Older Alluvium have yielded plant and vertebrate fossils. The closest occurrence is a fossil locality in the alluvium a few miles to the north in the near Cajon Pass. Both the Potato Formation and Older Alluvium are considered to be paleontologically sensitive. No paleontological resources were found during the field inspection conducted as part of this study.

NOP Comments

The Native American Heritage Commission (NAHC) sent a letter during the comment period on the Notice of Preparation. The NAHC requested the appropriate Native American groups be consulted regarding this proposed Specific Plan per the requirements of SB 18. The City contacted the local tribes in writing in 2007 and for the UHSP Notice of Preparation (2008) and did not receive any correspondence back that any of the tribes wanted to consult on this project under SB 18.

Regulatory Framework

Federal

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires federal agencies to consider the effects of proposed federal undertakings on historic properties. NHPA's implementing regulations require federal agencies (and their designees, permittees, licensees, or grantees) to initiate consultation with the State Historic Preservation Officer (SHPO) as part of the § 106 review process.

State

State Historic Preservation Programs

The State Office of Historic Preservation oversees four historic preservation programs:

- National Register of Historic Places (NRHP);
- California Register of Historical Resources (CR);
- California Historical Landmarks; and
- California Points of Historic Interest.

Each program has its own specific eligibility criteria, though historic resources often overlap on multiple lists. Resources listed in the National Register and California Historical Landmarks #770 and above are automatically listed in the California Register (CR). Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CR. As of October 2004, there were 1,041 California Historical Landmarks, 766 Points of Historical Interest, 2138 National Register listings, and more than 25,000 resources listed in the CR.

Local-City of San Bernardino

The Historical and Archaeological Resources Element of the City's General Plan establishes the following relevant policy related to cultural resources:

Policy 11.4 "Protect and enhance our historic and cultural resources."

Policy 11.5 "Protect and enhance our archaeological resources."

Analysis: The project site does not contain any identified historical or archaeological resources that will be impacted by development. The remnants of the former Circle K Camp will remain undisturbed within the permanent open space of the project.

4.4.3 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G, Environmental Checklist, to determine whether impacts to cultural resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

Cultural Resources

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

4.4.4 - Project Impacts and Mitigation Measures

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

Historic Resources

Impact CUL-1: Subsurface construction activities associated with the Proposed Project have the potential to damage or destroy previously undiscovered historic resources.

Impact Analysis

The project site contains two potential historical resources, the remnants of the Circle K Camp, which may also be the remnants of the J.W. Marshall homestead farm and fields, along the east side of Badger Creek. Jennifer Sanka, an archaeologist with MBA, evaluated the proposed land plan relative to these resources and determined this area will remain in undisturbed condition within the proposed open space preserve (Planning Area 24). Although the building remnants between Planning Areas 18 and 20 appear to be relatively recent and in poor condition, they are in an area slated for construction and should be assessed in greater detail before being demolished. Therefore, impacts to these potentially significant historical resources will be **potentially significant** and no mitigation is required in this regard.

No other historic resources have been recorded within the project site, nor were any encountered during the field surveys conducted for either the University Hills or the Paradise Hills projects.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1 The developer shall retain a qualified historian to survey the building remnants between Planning Areas 18 and 20 to determine if they have any historical significance prior to excavation of the site. Due to their condition, they could not be preserved or protected in place even if it is determined they had historical significance. If they are determined to be significant, the developer shall retain a qualified historian to document the resource characteristics for archival purposes

prior to demolition. The historian will prepare a report and submit it to the appropriate information center for their records.

Level of Significance After Mitigation

Less than significant impact.

Archaeological Resources

Impact CUL-2: **Subsurface construction activities associated with the Proposed Project could potentially damage or destroy previously undiscovered archaeological resources.**

Impact Analysis

The City General Plan designates areas that are considered to be archaeologically sensitive throughout the City, but the Proposed Project is not within one of these areas. No previously recorded archaeological resources are present within the project site, nor were any discovered during the field survey conducted by MBA in 2008 for the University Hills project or Chris Drover Ph.D. in 1989 for the Paradise Hills project. The previous Paradise Hills EIR indicated the low but potential presence of cultural resources in the project area, especially along Badger Creek, and recommended an archaeologist be retained to survey any resources found during grading. Since the time the EIR was prepared, the City has developed standard conditions of approval for archaeological monitoring during grading to protect undiscovered cultural resources. Subsurface excavation activities associated with the Proposed Project, such as trenching and grading, could potentially damage or destroy previously unknown archaeological resources, so this is considered a **potentially significant impact**.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-2 The developer shall retain a qualified archaeologist to monitor grading to the satisfaction of the staffs of the County Museum and City Development Services Department. If potentially significant archaeological or historic resources are encountered during subsurface activities, all construction within a 100-foot radius of the find shall cease until the monitor determines whether the resource requires further study. The developer shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist. Potentially significant cultural resources consist of, but are not limited to, glass, ceramics, stone, bone, wood, rock and shell artifacts or features, including hearths, structural remains, or pre-historic dumpsites. If the resource is determined to be significant under CEQA, a qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan, if necessary. The archaeologist shall also perform appropriate technical analyses, prepare a full written

report and file it with the appropriate information center, and provide for permanent curation of the recovered resources.

Level of Significance After Mitigation

Less than significant impact.

Paleontological Resources

Impact CUL-3: Subsurface construction activities associated with the Proposed Project could potentially damage or destroy previously undiscovered paleontological resources.

Impact Analysis

According to the 1990 paleontological survey by HRC, the fossil bearing potential of the rock units underlying the study property is variable. The onsite expressions of granitic rocks belonging to the Pre-Cambrian Igneous Complex, and the Paleozoic Marine Sedimentary and Metasedimentary Complex have little or no potential to yield paleontological resources. However, the Potato Formation and the Pleistocene Older Alluvium have yielded plant and vertebrate fossils and are considered to be paleontologically sensitive. There is a possibility that RanchoLabrean animal fossils may be discovered in the sediments on the UHSP property, even though no fossils were observed in outcrops on the study property during the 1990 HRC survey. Although, paleobiological remains may occur in these sediments, as they may in any other sediment, the likelihood of any being recovered from the proposed property is minimal. No fossils or sub-fossils were recorded from the alluvium in the region.

The site is somewhat unique in a geologic sense due to its proximity to the San Andreas Fault, however, there are no unique geologic features present on the project site that yield fossils or related artifacts. No recorded paleontological resources are known to be present within the project site, nor were any encountered during the field survey conducted for the Paradise Hills project. It should be noted that the project area has yielded vertebrate fossils in the past which may include, but are not limited to, mammoth, mastodon, tapir, horse, camel, pronghorn sheep, elk, rodents, birds, and reptiles.

While there are no recorded paleontological resources within the project site, the project is in an area that has yielded vertebrate fossils in the past. As such, subsurface construction activities associated with deep trenching or excavation could potentially damage or destroy previously undiscovered paleontological resources. This is a **potentially significant impact**. Since there is a possibility that paleontological resources may be impacted if grading occurs on the property, the HRC report recommended mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 Prior to the start of excavation, a qualified paleontological monitor will be retained to conduct an onsite monitoring program to ensure protection of previously unknown paleontological specimens. In the event a fossil is discovered during construction of the Proposed Project when the paleontological monitor is not present, excavation within 100 feet of the find shall be temporarily halted until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The developer shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the City of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Paleontologist determines that avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be submitted to the City for review and approval. Upon approval, the plan shall be incorporated into the project. The Paleontologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for permanent curation of any recovered resources.

Level of Significance After Mitigation

Less than significant impact.

Burial Sites

Impact CUL-4: Subsurface construction activities associated with the Proposed Project could potentially damage or destroy previously undiscovered burial sites.

Impact Analysis

Due to a lack of formal cemeteries, informal family burial plots, and lack of evidence of historic habitation within the immediate vicinity of the project footprint, the site is not expected to contain any human remains, including those interred outside of formal cemeteries. If any are encountered, construction will be halted as required by law, and the San Bernardino County Coroner shall be immediately advised.

Subsurface construction activities associated with project development such as trenching and grading could potentially damage or destroy previously undiscovered burial sites. This is a potentially significant impact. Mitigation is proposed to reduce this potentially significant impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-4 If human remains are encountered during earth-disturbing activities for the Proposed Project, all work within 100 feet of the find shall stop immediately and the San Bernardino County Coroner's office shall be notified. If the Coroner determines the remains are Native American in origin, the NAHC will be notified and, in turn, will notify the person determined to be the Most Likely Descendent (MLD). The MLD will provide recommendations for treatment of the remains (CEQA Guidelines § 15064.5; Health and Safety Code § 7050.5; Public Resources Code §§ 5097.94 and 5097.98).

Level of Significance After Mitigation

Less than significant impact.