Pleasant Valley Road (SR 49)/Patterson Drive Intersection Signalization Project

Archaeological Survey

Diamond Springs, El Dorado County, California

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(Revised April 2009)

Prepared for:
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7.5' USGS Quadrangle: Placerville, California (1973)
Acreage: Approximately 9 acres
Potentially Significant Cultural Resources: None

Figures

Attachments

Attachment A (*Confidential: Not for Public Distribution*)
Native American Heritage Commission Consultation List Requests
Native American Heritage Commission Response
Tribal Consultation Outreach Letter
Tribal Outreach Communication Log

1 Summary of Findings

1.1 Abstract

This report documents a reconnaissance-level archaeological investigation conducted for the Pleasant Valley Road [State Route (SR) 49]/ Patterson Drive Intersection Signalization Project. The approximately 9-acre project area, herein referred to as the area of potential affect (APE), being contiguous with the areas subject to direct effects (including staging areas), is located on Pleasant Valley Road (SR 49) at its juncture with Patterson Drive, between the communities of El Dorado and Diamond Springs, El Dorado County, California; in Township 10 North, Range 10 East, Section 25 (MDBM) of the *Placerville, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (Figure 1).

1.2 Proposed Project

The survey and archival research reported herein was completed at the request of the El Dorado County (County) Department of Transportation (DOT), which proposes signalization and road improvements at the intersection of Pleasant Valley Road (SR 49) and Patterson Drive.

1.3 Purpose and Scope of the Survey

The El Dorado County DOT requested an archaeological investigation (including pedestrian survey and archival research documented herein) to determine whether any potentially significant archaeological resources are present within the APE. The entire approximately 9-acre APE was subject to pedestrian survey, archival research, and tribal outreach.

1.4 Constraints to the Survey Effort

The main constraint to the survey effort was lack of mineral soil visibility at the APE. Approximately 50 percent of the APE is paved, including the entire existing portions of Ryan Drive, Patterson Drive, Pleasant Valley Road (SR 49), and Gold Dust Drive; and the frontage property (Tower Mart) occupying the northeast corner of the intersection of Pleasant Valley Road and Patterson Drive. Mineral soil is not visible in the paved portions of the APE.

Mineral soil visibility was estimated to be good (60 to 85 percent) at the APE along roadside embankments (slopes that would be graded), flat ground adjacent to road or sidewalks (e.g., road shoulders, edges of sidewalks adjacent to undeveloped lands), and within the large graded undeveloped lot (APN 331-310-09) occupying the southeast corner of the intersection of Pleasant Valley Road and Patterson Drive. It is estimated that these locations compose about 50 percent of the APE. Aside from a lack of mineral soil visibility over approximately 50 percent of the APE, no constraints hampered the survey effort. The project APE was readily accessible, and all landforms were easily traversed in transects spaced between 15 and 30 meters apart.

1.5 Identified Resources

No archaeological resources were identified within or immediately adjacent to the surface of the APE. If buried cultural materials are encountered during construction, work must stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional surveys may be required if the project changes to include areas not previously surveyed.

2 Introduction

On May 5, 2008, Nicole A. Ramirez, Archaeologist for North State Resources, Inc. (NSR), conducted a complete-strategy, reconnaissance-level pedestrian survey of the entire APE (Figure 1). Ms. Ramirez is an archaeologist who meets the Secretary of Interior Standards and Guidelines as an Archaeologist (Caltrans Qualification Level 3, Co-Principal Investigator). Survey methods were based on the current conditions at the APE, pre-field research findings, and tribal outreach. Although archival research indicated that approximately 90 percent of the APE had previously been surveyed for cultural resources (Peak & Associates 1988; Supernowicz 1997), the entire APE was surveyed for this investigation (Figure 2).

3 Project Location and Description

The location of the APE and the complete reconnaissance pedestrian survey coverage corresponds to a portion of Section 25 (T10N., R.10E., M.D.B.M.) of the *Placerville, California* USGS 7.5 minute topographic quadrangle (Figure 1).

The El Dorado County (County) Department of Transportation (DOT) proposes to improve the intersection of Pleasant Valley Road (State Route 49) and Patterson Drive in El Dorado County, California. The project site is located approximately 0.42 mile northeast of Diamond Springs and approximately 1 mile north of the community of El Dorado.

The project study area encompasses approximately 9.0 acres, including approximately 1,775 feet of Pleasant Valley Road (960 feet east of the intersection and 815 feet west of the intersection), a short portion of Ryan Drive, the majority of Assessor Parcel Number (APN) 331-310-09 as a potential staging area, approximately 680 feet of Patterson Drive, and the majority of the Tower Mart frontage.

The proposed improvements include the widening of approaches to the intersection; installation of curbs, gutters, and sidewalks; minor landscaping; installation of traffic signals; installation of drainage improvements; and the addition of turn pockets. The improvements are intended to alleviate traffic congestion and are part of the County growth plan. The signals will be installed in accordance with the California Manual of Uniform Traffic Control Devices (CAMUTCD). A combination of County and State funds would be used for the implementation of this project.

4 Sources Consulted

4.1 Summary of Methods and Results

Archaeological Records Search

A review of archaeological records was conducted by Ms. Kristina Crawford, NSR Archaeologist, on April 29, 2008, using the North Central Information Center of the California Historical Resources Information System (CHRIS), California State University, Sacramento (Records Search No. ELD-08-46). The records search encompassed a 0.50 mile radius from the APE. The purpose of the archaeological records search was to: obtain research context (e.g., previous investigations); determine the presence/absence of any known archaeological sites within the APE; and define specific portions of the APE requiring field surveys. As a result of the NCIC records search, it was determined that approximately 90 percent of the APE had been subject to archaeological surveys prior to the NSR investigation (Peak & Associates 1988; Supernowicz 1997). Review of the previous investigations revealed that no archaeological sites were recorded within the APE.

General Land Office Plat

On April 29, 2008, Ms. Crawford reviewed the 1870 General Land Office (GLO) Plat map of Township 10 North, Range 10 East. Based on this review, it is known that placer mining occurred in areas immediately surrounding the APE.

Office of Historic Preservation

On May 28, 2008, Ms. Ramirez reviewed the following registers: National Register of Historic Places (NRHP); California Historical Landmarks; California Points of Historical Interest; and California Historical Landmarks listing. No registered cultural or historic resources were identified within or adjacent to the APE (USDA National Park Service 2008; State of California Office of Historic Preservation 2008).

Historic Land Use Records

On May 28, 2008, Ms. Ramirez reviewed the Bureau of Land Management General Land Office historical online land patent records and found that the APE lies within two historic land patents (Bureau of Land Management 1871, Bureau of Land Management 1874). Relevant results indicate that on:

- November 18, 1871 Robert Nelson was awarded a mineral patent for placer mining in the northern half of the southwest quarter section of Section 25 (T 10N, R 10E), including the northern half of the APE (Bureau of Land Management 1871).
- April 4, 1874, Charles B. Holmes made a cash-sale purchase of 40 acres in the southwest portion of the northeast quarter of Section 25 (T 10N, R 10E) (Bureau of Land Management 1874).

4.2 Summary of Others Consulted

April 17, 2008. Mr. Patrick Brunmeier, NSR Archaeologist, contacted the Native American Heritage Commission (NAHC) via fax requesting a list of pertinent tribal contacts and to alert them to check their Sacred Lands File (SLF) for potential significant cultural resources that may be directly or indirectly affected by project within the APE.

April 29, 2008. Ms. Nicole A. Ramirez, mailed a letter to the NAHC requesting the same information as the April 17, 2008 fax to the NAHC.

April 25, 2008. The NAHC responded via fax to Mr. Brunmeier with the list of pertinent tribal contacts.

May 12 2008. The NAHC responded with a null result for cultural resources in the APE listed in their SLF.

June 30 2008. Ms. Nicole A. Ramirez, conducted follow-up phone calls to all individuals listed on the NAHC list of pertinent tribal contacts. No new information regarding the APE was acquired (Attachment A).

4.3 Summary of Tribal Outreach

A Request for Comment letter (Attachment A) was mailed May 2, 2008 to:

- Mr. Randy Yonemura
- Mr. Kenneth Counsil
- Ms. Jeri Scambler, Chairperson, El Dorado Miwok Tribe
- Mr. Brian Padilla, El Dorado Miwok Tribe
- Mr. Wesley Yeilding, El Dorado Miwok Tribe
- Mr. Matthew Franklin, Chairperson, Ione Band of Miwok Indians
- Mr. Cosme Valdez, Interim Chief Executive Officer, Nashville- El Dorado Miwok
- Mr. John Tayaba, Vice Chairperson, Shingle Springs Band of Miwok Indians
- Mr. Christopher Suehead, Cultural Representative, Todd Valley Miwok- Maidu Cultural Foundation
- Ms. Jessica Tavares, Chairperson, United Auburn Indian Community of the Auburn Rancheria
- El Dorado County Indian Council
- Ione Band of Miwok Indians, Heritage Cultural Committee
- Shingle Springs Band of Miwok Indians, Band of Miwok Indians
- United Auburn Indian Community of the Auburn Rancheria, Tribal Preservation Committee

The letter requested a response within 30 days. To date, no specific information regarding potentially significant resources was received.

One letter, to Brian Padilla of the El Dorado Miwok Tribe, was returned by the U.S. Post Office as undeliverable on May 9, 2008.

5 Background

5.1 Environment

The APE is located in the Sierra Nevada foothills approximately 0.4 mile north of Patterson Dam and Reservoir. A swale-like landform bisects the APE as it passes under a portion of Pleasant Valley Drive (SR 49) via a culvert. No other hydrologic features are identifiable in the APE.

The community of Diamond Springs is situated about 0.42 mile to the northeast of the APE; the community of El Dorado is situated about 1 mile to the west. Current conditions at the APE include: paved County and state roadways (Pleasant Valley Drive/State Route 49; Patterson Drive; Gold Dust Drive; Ryan Drive). Current conditions adjacent to the APE include commercial retail (Tower Mart), private residential parcels, and rural open lands. It is estimated that approximately 50 percent of the APE has been previously graded, and approximately 50 percent of the APE consists of paved surfaces (e.g., roads, sidewalks).

The climate of the APE and surrounding areas is characterized by warm, dry summers and mild, wet winters. The average annual precipitation is 38.5 inches with an average of 2.7 inches of precipitation being from snowfall (Western Regional Climate Center 2008).

The elevation at the APE is approximately 1,740 feet above mean sea level. Terrain at the APE includes hills, flats, swales, trough-like valleys, and slopes. The entire APE is essentially situated in broad, flat, trough-like landform, occupying space between hills, with a swale-like wetland area that bisects the APE. Three of the tree-covered hills visible northwest from the APE consist entirely of mine tailings, the closest being 50 feet north of the APE (U.S. Department of Agriculture, Natural Resources Conservation Service 2008).

Overstory vegetation at the APE includes foothill pine (*Pinus sabiniana*), ponderosa pine (*Pinus Ponderosa*), interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and blue oak (*Quercus douglasii*). The understory vegetation in the area includes grasses, forbs, shrubs, and non-native ornamentals.

The *Geologic Map of California, Sacramento Sheet* (1965) indicates that the geology of the APE is Upper Jurassic marine deposits, (sedimentary or meta-sedimentary rocks) and Jura-Trias metavolcanic rocks formed during the Jurassic Period of the Mesozoic Era between 200 million and 140 million years ago.

Three soil types are present within the APE: Diamond Springs very fine sandy loam; mixed alluvium; and Auburn silt loam (U.S. Department of Agriculture, Natural Resources Conservation Service 2008). A soil unit map is presented as Figure 3.

Diamond Spring very fine sandy loam (DfC)

This soil is a fine-grained, acidic residuum weathered from igneous rock. Typical depth to weathered bedrock is 40 to 44 inches. This soil is not typically subject to flooding. The typical setting of this soil is on mountain backslopes (9 to 15 percent slope).

Mixed alluvial land (MpB)

This soil is mixed alluvium derived from volcanic and sedimentary rock. Typical depth to weathered bedrock is 36 to 40 inches. This soil is subject to frequent flooding. The typical setting of this soil is within channels of alluvial plains.

Auburn silt loam (AwD)

This soil is amphibolite schist. Typical depth to lithic unweathered bedrock is 14 to 18 inches. This soil is not typically subject to flooding. The typical setting of this soil is on backslopes (2 to 30 percent) of foothills.

5.2 Prehistory

Paleolithic Period (11500 to 8000 B.P.)

The earliest known and least understood occupation of Northern California is in the *Paleolithic Period* (11500 to 8000 B.P.). Artifacts associated with this pattern include a Clovis-like fluted concave-base projectile point most likely used in conjunction with an atlatl and chipped stone crescents.

Early Archaic Period (8000 to 5000 B.P.)

The *Early Archaic Period* (8000 to 5000 B.P.) widely known as the *Borax Lake Pattern* is typified by large lanceolate, corner-notched, and wide-stemmed projectile points. These points, along with large bladelette flakes and unifacial flaked stone tools, are typically manufactured from local obsidians, cherts and basalts. Manos (handstones) and milling slabs are the most common form of milling equipment.

Middle Archaic Period (5000 to 3000 B.P.)

The *Middle Archaic Period* (5000 to 3000 B.P.), often discussed as the *Windmiller Pattern* for the Lower Sacramento Valley area, is characterized by the continued use of manos (handstones) and metates (milling slabs), and the early introduction of the mortar and pestle. Stone tool forms include contracting stem projectile points, unifacial flake tools, awls, and wedges from a wider variety of obsidian sources. Atlatl weights imply use of the atlatl as the primary hunting weapon. Net weights, fish hooks, and a unique form of trident fish spear imply an increased reliance on fishing (Moratto 1984). Many baked clay objects including cooking stones and pear-shaped “sinkers” are commonly found in the matrix of Windmiller sites. Nearly all burials associated with this pattern are found extended with the head oriented towards the west, and are found in large cemeteries separate from the villages (Moratto 1984, Wallace 1978).

Late Archaic Period (3000 to 150 B.P)

The *Late Archaic Period* (3000 to 150 B.P) includes two distinct patterns: the *Berkeley Pattern* and the *Augustine Pattern*.

Berkeley Pattern (3000 to 1700 B.P.)

The *Berkeley Pattern* (3000 to 1700 B.P.) exhibits distinct regional variations in cultural remains; however, certain characteristics are found in common, including the continued use of the atlatl as a hunting weapon and a well-developed bone tool industry. Small to large side-notched and corner-notched darts are the most common form of projectile point. Manos and metates remained in use throughout this period with an increase in mortar and pestle use indicating an increased focus on acorn as a staple component of the diet. Evidence of increased trade throughout the region is evidenced by an increase in marine shell beads, exotic obsidians, and widespread stylistic traits (White 2005).

Augustine Pattern (1700 to 150 B.P)

The *Augustine Pattern* (1700 to 150 B.P) is marked by the introduction of the bow and arrow and the adoption of the hopper mortar and pestle (Moratto 1984). Small projectile points (Gunther series, Desert Side-Notch series) suitable for arrow tips are found with increasing frequency in archaeological contexts. Hopper mortars, indicative of intensive use of acorn, became the dominant milling equipment. Manos and milling stones were used infrequently. The reliance on acorn and river resources, such as salmon, led to the development of food preservation and storage (e.g., granaries). Well established trade networks were in use, as evidenced by obsidian from distant sources as well as coastal shell beads. Clamshell disc beads, spire lopped *Olivella* beads, and *Haliotis* ornaments and pendants were commonly used as ornamentation. This pattern is associated with the ethnographically known Nisenan.

5.3 Ethnography

The APE lies in the ethnographic territory of the Nisenan Maidu (Southern Maidu). Traditionally this territory covered the area from Sacramento in the southwest, east to the Cosumnes River and up the foothills to the Sierra Nevada crest, north along the crest to the headwaters of the North Fork of the Yuba River, west along this river to the Feather River just above present day Marysville, and south to the confluence of the Feather River and the Sacramento River. The Nisenan had a loose political organization with six main tribelet centers based around several main villages, with smaller settlements and temporary camps as satellites. The area between the Cosumnes River and the South Fork of the American River, particularly the area around modern-day Placerville, was one such tribelet. In the foothills, villages were located on large flats near creeks or on ridges. Buildings in these villages included conical-shaped houses covered in bark, skins, and brush; acorn granaries; large, earth-covered, semi-subterranean dance houses; and brush shelters (Dixon 1905, Kroeber 1925, Wilson and Towne 1978). Bedrock mortar stations were also found within or near to settlements.

Acorns were the main staple; however pine nuts, hazelnuts, and buckeyes were also gathered and stored. Roots including wild onion and *Brodiaea* sp. were eaten; wild garlic and soaproot were used as body washes (Wilson and Towne 1978). Berries and fruits including grapes, wild plums, manzanita, and blackberries were eaten, various grass seeds were gathered, and a variety of greens and herbs were collected. The basic plant processing technology was the mortar, usually made from fire-hardened oak and pestle, with some use of the mano (handstone) and metate (milling slab) (Kroeber 1929). Acorns were shelled and pounded into flour using a pestle and basket hopper mortar. During the preparation of acorn flour, soaproot brushes and winnowing trays were used to separate coarse

ground acorn from the fine ground (Dixon 1905). Seeds were ground with a pestle or mano; berries, insects, and bones were processed in a similar manner.

As was common for the majority of California cultures, textiles and basketry formed a large part of daily life. Baskets and textiles were used for storage, food processing, cooking, gathering, and adornment and took many forms including winnowing trays, seed beaters, hopper baskets, burden baskets, hats, cradles, traps, mats, and cooking baskets. Various plants were used in the construction of baskets and textiles; a brief list includes willows, redbud, hazel, ponderosa pine, maiden-hair fern, tule, and various sedges, rushes and grasses (Dixon 1905, Wilson and Towne 1978). Bone awls and needles, and stone flake tools were used during the construction of baskets and nets.

The Nisenan had a varied diet with few animals (dog, coyote, wolf, vultures, grizzly bear, reptiles and amphibians) considered taboo (Kroeber 1925). Deer, elk, black bear, mountain lions and bobcats, rabbits and other small game were hunted in a variety of ways including communal drives, fire, decoys, snares, deadfalls, traps, nets, rodent hooks, and bow and arrow (Wilson and Towne 1978). Birds including quail, ducks, geese, dove, and crows were often taken with the use of decoys, nooses, nets, and arrows (Kroeber 1925). Fish, especially salmon, eel, trout, suckers, and whitefish were captured with weirs, nets, harpoons, and gorge hooks, or poisoned with mullein or soaproot and gathered by hand (Wilson and Towne 1978). Salmon and eel were dried and stored, and salmon and deer vertebrae were ground and used raw or baked in little cakes (Dixon 1905). Freshwater mussels and clams were collected along the larger waterways. Invertebrates including worms, larvae of several species, ants, crickets, and grasshoppers were gathered. Hunting and collecting equipment included decoys, nets, traps, snares, weirs, poisons, and the bow and arrow. Stone tools including knives, hide scrapers, projectile points, and stone flake tools were used in the construction of equipment, hunting, and processing of game.

5.4 Historic Background

Early historic contact between the foothill Nisenan and Euro-Americans begins with the Mexican American period and the naturalization as a Mexican citizen and granting of New Helvetia to Johann (John) Sutter 1839 (Bancroft 1886). Sutter employed many local Native Americans, Native Hawaiians, and a few American European migrants in pastoral and agricultural work, construction of a fort and other infrastructure tasks. On January 24, 1848 James Marshall while in the employ of John Sutter, discovered gold in the water of the South Fork of the American River at Coloma (approximately 11 miles northeast of the APE) (Cutter 1948). Eventually word of this discovery leaked out and so began the California Gold Rush. Three years after the discovery of gold on the American River the entirety of the foothill Nisenan territory was occupied by miners and settlers. Cook (1976) estimated the population for the Maidu, including the Northern Maidu, Konkow, and Nisenan, to be 7,000 people in 1848, and by 1880 to be 1,000 people. This population decrease is attributed to disease, interpersonal violence, military-militia campaigns, and general loss.

In early 1848, the Mexican and European California population was estimated to be approximately 18,000. In 1849 nearly 90,000 people, of which nearly 60,000 were Americans, had entered the region, and by 1853 the total immigrant population is estimated to be 300,000 (Starr 2000).

Many of these immigrants were lured by the false promise of easy riches to be found in mining. Placer mining, the easiest and earliest form of gold extraction practiced, needed only a minimum of equipment such as a pan, sluice box, or rocker. The placer mines followed existing stream channels removing the gold from the gravels found therein. Often this was accomplished by diverting the water away from the active mine in the channel and feeding it through the box or rocker and back into the streambed. Small water ditches and dams, tailings piles of broken rock, dry laid rock walls, and small habitation areas containing cabin flats, mining equipment and other dispersed trash scatters are often the only evidence of this early era of mining activities.

With diminishing returns from placer mining, the hydraulic mining technique using water under pressure to wash hills and gravels into long sluices became widely used. Water was stored in large reservoirs in the high Sierra Nevada and channeled through a system of ditches and flumes to the mines. By 1865, over 832 miles of large water ditches had been built at a cost of over $1,515,500 in El Dorado County (Browne 1869). The debris from this process was allowed to flow freely back into stream channels creating a run-off called "slickins." The debris build-up caused flooding in the valley towns and, in many cases, covered valuable agriculture land in several feet of sediment. In 1884, in a case brought against hydraulic mining companies by farmers and Sacramento Valley cities, the U.S. Circuit Court for Northern California ruled in favor of the plaintiffs stating hydraulic mining was "a public and private nuisance" (Francis and Francis 2003:106). After the cessation of hydraulic mining, many miles of small ditches were abandoned, and the main trunk lines were converted over to agricultural use or electric power generation (Johnson 1997).

Pleasant Valley Road (within the APE) is contiguous with a portion of State Route 49. This historic highway was established in the mid-19th century, first as part of the stageline that ran from Sacramento to Coloma and shortly thereafter as part of the Northern California Pony Express (Sioli 1883). Alt and Hyndman write that "[a] large portion of all the gold ever mined in California was recovered within sight of this narrow road" (2002:49).

Many immigrants, unable to turn a profit from mining, turned to agricultural pursuits. The foothills of the Sierra Nevada in El Dorado County were ideal for wine grapes; hay and grains; apple, peach, pear trees; strawberries; and cattle grazing (California Surveyor General's Office 1867). Today, wine grapes, apples, Bartlett pears, peaches, and range land are the largest agricultural concerns (El Dorado County Economic Development Department 2005).

General, overarching historical themes for the APE and vicinity include:

- Transportation/emigration/settlement of El Dorado County;
- Agricultural development of El Dorado County;
- Ecological effects of gold mining and agriculture.

6 Field Methods

On May 5, 2008, Nicole A. Ramirez, NSR Archaeologist who meets the Secretary of Interior Standards and Guidelines as an Archaeologist (Caltrans Qualification Level 3, Co-Principal Investigator), conducted a complete strategy pedestrian reconnaissance survey of the entire APE.

Survey transects were spaced no more than 15 meters apart and the slope of the APE was no greater than 5 percent at any part.

Within the vicinity of the intersection of Pleasant Valley Road and Patterson Drive is a Tower Mart on the northeastern side of Patterson Drive and an undeveloped lot along the southwest side of Patterson Drive. No mineral soil was visible in the paved, Tower Mart parking area. Surface visibility of mineral soil along the road was between 50 to 80 percent depending on vegetation and concentrations of roadside gravels.

Vacant Lot on the Southwest Corner of Pleasant Valley Road and Patterson Drive

The overall surface and ground cover of the open lot was sparse with good surface visibility of 50 to 90 percent. The surveyed area within the open lot receives heavy pedestrian traffic, as well as, some motor traffic. The lot also has a large spoils pile of road material at its southern end and a line of old fence posts set in concrete along the southwestern side near Pleasant Valley Road. Visibility along Pleasant Valley Road was good as there was little vegetation and a significant amount of gravel. Surface visibility here was estimated to be 80 to 90 percent.

7 Conclusions and Recommendations

The entire APE (depicted in Figure 1) was subject to archival research and pedestrian survey. No potentially significant archaeological sites or isolates (e.g., buildings, structures, objects, properties in excess of 45 years of age with significant associations and integrity) were identified as a result of previous investigations. Several archaeological resources have been recorded for the surrounding area, which include prehistoric sites with ground stone artifacts and historic placer mining sites. No archaeological sites were previously recorded within the APE, and no archaeological sites were located as a result of this investigation.

Surface surveys are unable to detect buried resources. Archival research can yield general observations about archaeological sensitivity (e.g., the probability of encountering archaeological deposits, buried or not). Sensitivity can be assessed based on the characteristics and distribution of known (e.g., archived) cultural resources and environmental factors (formational processes, landforms, distance to water, slope, frequency of flooding/scouring, aspect, etc.).

Because prehistoric archaeological sites and historic mining and transportation sites are common in the vicinity of the APE, because the soil types are sedimentary and not subject to flooding/scouring events, because about half of the APE is original ground with low slope gradient, and because the APE

is near a headwaters, this investigation concluded that the vicinity of the APE possesses a moderate potential to contain the following types of cultural resources:

- Potential archaeological resources that could be associated with historic placer mining and historic homesteading activities; and

- Potential prehistoric bedrock mortars and historic mining buildings possibly associated with Chinese immigrants based on associated artifacts.

7.1 Significance Criteria

Under CEQA, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources or the National Register of Historic Places significance criteria (36 CFR 800.4(c)). Significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- are associated with events that have made a significant contribution to the broad patterns of our history;

- are associated with the lives of persons significant in our past;

- embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

- have yielded or may be likely to yield, information important in prehistory or history.

Under CEQA, thresholds of significance are used to determine the significance of environmental effects. A threshold of significance is defined as an identifiable quantitative, qualitative, or performance level of a particular environmental effect. Impacts to cultural resources are considered significant if implementation of a proposed project would potentially disturb cultural resources or properties (i.e., buildings, structures, objects, Traditional Cultural Places) eligible for the National Register or California Register of Historical Resources. CEQA Guidelines Section 15064.5 defines a "substantial adverse change in the significance of an historical resource" to mean "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines, Section 15064.5, subd. (b)(1)).

7.2 Other Potential Impacts and Recommended Measures

Potential Impact

The pedestrian surface survey was conducted to determine the presence or absence of prehistoric and historic resources on the surface of the undertaking area. Buried resources, if any, would not be located during a pedestrian surface reconnaissance investigation; therefore, there is the potential for

buried cultural resources to exist within the undertaking area. In the event that buried cultural resources are present within the undertaking area, ground-disturbing activities associated with project development have the potential to result in adverse impacts.

Mitigation Measures

In the event archaeological resources (e.g., buildings, structures, or objects older than 45 years of age), excluding NSR-ISO-McF-001 are unearthed during excavation activities, all work in the immediate vicinity of the discovery shall be stopped immediately and the El Dorado County DOT shall be notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the find and recommend appropriate conservation measures. The conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

If human remains are found in the undertaking area during earth-moving activities such as grading or trenching, work shall be suspended and the El Dorado County Coroner's Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner shall contact the Native American Heritage Commission (NAHC). Treatment of the remains shall be conducted in accordance with the direction of the County Coroner or the NAHC, as appropriate.

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ATTACHMENT A:

Confidential: Not for public distribution.
Native American Heritage Commission Consultation List Requests
Native American Heritage Commission Response
Tribal Consultation Outreach Letter
Tribal Outreach Communication Log