

5.6 CULTURAL RESOURCES**5.6.1 Significance Criteria**

Potential impacts to cultural resources could occur if:

- A substantial adverse change in the significance of a historical resource either listed or eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or a local register of historic resources were to occur, or
- The project were to cause a substantial change in the significance of a unique archaeological resource, destroy a unique paleontological resource or site or disturb human remains, including those interred outside of formal cemeteries.

Potential impacts to archaeological and historic resources are further defined as follows:

- Potentially Significant Impacts are those resulting from construction, operation, or maintenance activities that would adversely impact the integrity of significant or potentially significant prehistoric archaeological resources, and are unavoidable as the project is planned. Examples of these resources are archaeological resources or historic districts that cover an extensive area, are materially dense, and provide little or no opportunity for avoidance or adequate mitigation.
- Less Than Significant Impacts are those resulting from construction, operation, or maintenance activities that could adversely impact the integrity of significant or potentially significant prehistoric archaeological resources, and for which there is sufficient opportunity for resource avoidance. Examples of these resources are archaeological resources or historic sites that have an uneven distribution providing adequate opportunities for avoidance, or for which adequate mitigation is available.
- No Impacts would occur where no known or previously unrecorded resources are present in the project area or close enough to be impacted by the project.

Paleontological resource sensitivity is further defined as follows:

- Paleontologic sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the rock unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontologic sensitivity is derived from the fossil data collected from the entire geologic unit, not just from a specific survey.

A three-tiered classification system for paleontological sensitivity, recommended by the Society of Vertebrate Paleontologists (SVP) and recognized in California is listed below:

- High sensitivity – Indicates fossils are currently observed onsite, localities are recorded within the study area and/or the unit has a history of producing numerous significant fossil remains.
- Low sensitivity – Indicates significant fossils are not likely to be found because of a random fossil distribution pattern, extreme youth of the rock unit and/or the method of rock formation, such as alteration by heat and pressure.
- Indeterminate Sensitivity – Unknown or undetermined sensitivity indicates that the rock unit has not been sufficiently studied or lacks good exposures to warrant a definitive rating. This rating is treated initially as having a high sensitivity or potential. After study or monitoring, the unit may fall into one of the other categories.

Fossils are considered to be scientifically significant if they meet or potentially meet any one or more of the following criteria:

- Taxonomy – fossils that are scientifically judged to be important for representing rare or unknown taxa, such as defining a new species.
- Evolution – fossils that are scientifically judged to represent important stages or links in evolutionary relationships, or fill gaps or enhance under-represented intervals in the stratigraphic record.
- Biostratigraphy – fossils that are scientifically judged to be important for determining or constraining relative geologic (stratigraphic) age, or for use in regional to interregional stratigraphic correlation problems.
- Paleoecology – fossils that are scientifically judged to be important for reconstructing ancient organism community structure and interpretation of ancient sedimentary environments.
- Taphonomy – fossils that are scientifically judged to be exceptionally well or unusually or uniquely preserved, or are relatively rare in the stratigraphy.

5.6.2 Segment 2

5.6.2.1 Construction

Along proposed Segment 2 and Alternatives AV1 and AV2, there are 28 prehistoric archaeological sites and four historic sites. The prehistoric sites include an occupation site (CA-LAN-954), seven lithic scatters (CA-LAN-952, -953, -959, -1645, -1755, -1960, and – 2303), one roasting pit (CA-LAN-405), a quarry (CA-LAN-806), pictographs and petroglyphs (CA-LAN-947, -1636), two cupule sites (CA-LAN-1957, -1956), four bedrock

milling stations (CA-LAN-1335, -1627, -1628, -3393), nine hunting blinds (CA-LAN-1759 through -1764, CA-LAN-1769 through -1771), and depressions (CA-LAN-1643).

The historic sites along this route include a stone cabin foundation (CA-LAN-1758H), a building foundation (CA-LAN-1841H), a historic refuse deposit (CA-LAN-1644H), and a historic SCE T/L (P-19-186857). For the paleontological resources, there is the potential of encountering significant fossils of older Quaternary age.

These sites collectively represent the prehistoric and historic land uses of the area encompassing proposed Segment 2 and how those land uses changed over time, thereby contributing to our understanding of the prehistory of the project area. Nevertheless, per the model discussed above, should the route be constructed along proposed Segment 2, potential impacts are anticipated to be less than significant. It should be kept in mind, however, that the limited scope of the fieldwork precluded a comprehensive search for updated and new archaeological sites.

5.6.3 Segment 3

5.6.3.1 Construction

There are 62 prehistoric archaeological and 14 historic sites in the area around proposed Segment 3, including Alternatives A, B, and C, and Substations One and Two. As the proposed T/L routes are so close in proximity to each other, they are considered together here. The prehistoric sites include 32 lithic scatters (for trinomials, see Table 1 in Appendix E), four habitation sites (CA-KER-320, -1803, -1998, and -6062), nine quarries or quarry workshops (CA-KER-5565 through -5569, CA-KER-6015 through -6018), 12 milling station sites (CA-KER-1420, -1515, -1677, -1678, -1801, -1804, -1805, -2433, -2819, -3324, -3393, and -4414), three rocks rings or cairns (CA-KER-1320, -1321, and -1322), and roasting pits or hearths (CA-KER-321 and -2434).

Historic sites along these routes include a house site with a privy (CA-KER-1323H), a burial with picket fence (CA-KER-1615H), a cemetery (CA-KER-3560H), remains of a small country school (CA-KER-3053H), miners' test holes (CA-KER-1949/H; also has a prehistoric component with bedrock mortars and lithics), portions of historic roads (CA-KER-3537H, -3538H, -3542H, and P-15-004755), portions of the Los Angeles Aqueduct (CA-KER-3535H, -3536H, and -4591H), a historic refuse deposit (CA-KER-1477H), and State Historic Landmark No. 37 (CA-KER-7346H). For the paleontological resources, there is the potential of encountering significant fossils of older Quaternary and Late Miocene age.

As with proposed Segment 2, the sites in this part of the study area collectively represent the prehistoric and historic land uses of this area and how those uses changed over time, thereby contributing to our understanding of the prehistory of the region. Nevertheless, per the model

discussed above, should the route be constructed along proposed Segment 2, potential impacts are anticipated to be less than significant. It should be kept in mind, however, that the limited scope of the fieldwork precluded a comprehensive search for updated and new archaeological sites.

5.6.4 Mitigation Measures

5.6.4.1 Segments 2 and 3

5.6.4.1.1 APM Cultural-1: Archaeological and Historic Resources. As demonstrated by the records search and field check phases of the Antelope Transmission Project, a number of archaeological and historical resources occur along the proposed T/L routes and substation sites. Therefore, prior to construction, a full-scale archaeological reconnaissance will be undertaken for the approved T/L routes and substations sites. Based on the results of the surveys archaeological monitoring will take place as needed in order to minimize any potential impacts to these resources. In some cases, additional mitigation measures might be necessary in order to reduce potentially significant impacts to a less than significant level on such resources. These mitigation measures may include, but not be limited to, standard test pits, testing for depth and extent of an archaeological deposit, or data recovery. Unanticipated discoveries will be dealt with in a similar fashion, in compliance with applicable State and Federal guidelines.

5.6.4.1.2 APM Paleo-1: Paleontological Resources. The following mitigation measures have been developed to reduce the adverse impacts of project construction on paleontological resources to a less than significant level. The measures are derived from the guidelines of the SVP and meet the requirements of Kern and Los Angeles counties and CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction:

1. A certified paleontologist will be retained by SCE to monitor construction activities within areas of paleontological sensitivity for the proposed project. Paleontological monitoring would include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor would have authority to temporarily divert grading away from exposed fossils in order to recover the fossil specimens.
2. If microfossils are present, the monitor would collect matrix for processing. In order to expedite removal of fossiliferous matrix, the monitor may request heavy machinery to assist in moving large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles would consist of screen washing small samples to determine if significant fossils are present. Productive tests would result in screen

washing of additional matrix from the stockpiles to a maximum of 6,000 pounds per locality to ensure recovery of a scientifically significant sample.

3. Quaternary Alluvium, Colluvium and Quaternary Landslide Deposits have a low paleontological sensitivity level, and would be spot-checked on a periodic basis to insure that older underlying sediments are not being penetrated. All soil removal would be monitored.
4. A certified paleontologist would prepare monthly progress reports to be filed with the client.
5. Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.
6. At each fossil locality, field data forms would record the locality, stratigraphic columns would be measured, and appropriate scientific samples would be submitted for analysis.
7. The certified paleontologist would prepare a final mitigation report to be filed with the client, the lead agency, and the repository.

Implementation of the measures above would mitigate all potential impacts to paleontological resources to a less than significant level.