5.4 CULTURAL RESOURCES – ARCHAEOLOGICAL RESOURCES

This section of the EIR addresses the potential impacts of the project on archaeological resources. Archaeological resources include sites, objects, and artifacts affiliated with Native Americans, and historical archaeological resources, which are non-Native American in origin. The analysis in this section is based on the *Archaeological and Tribal Cultural Resources Assessment for the La Brea Tar Pits Master Plan Environmental Impact Report, Los Angeles, California* prepared by SWCA Environmental Consultants (Millington and Dietler 2023). This report will remain part of the confidential administrative record because of the detail describing the specific location of the archaeological site components. This section, in combination with Section 5.5, Cultural Resources – Historical Resources, addresses the potential impacts encompassing cultural resources as described within Section V of the environmental checklist form (Appendix G) of the State CEQA Guidelines.

5.4.1 Existing Conditions

5.4.1.1 Native American Archaeological Record

The Native American archaeological record for California is generally organized into three broad temporal periods—the Paleoindian, Archaic, and Emergent periods. Numerous chronological sequences were also devised to characterize cultural changes on a smaller scale, specifically within the subregion of Southern California. The chronology used by Wallace (1955) is applicable for near-coastal and some inland settings in the Southern California coastal region and is composed of four sequential horizons: Horizon I, Early Man; Horizon II, Milling Stone; Horizon III, Intermediate; and Horizon IV, Late Prehistoric (Late Period). Wallace's horizons are presented below to provide a reference point for the primary periods and cultural traditions. Because contemporary archaeological studies increasingly use geological time periods as a means of grouping diverse regional typologies, these have been incorporated into the structure below and are further denoted by years before present (B.P.) and calendar ages (B.C. and A.D.).

A description of the lifeways of Native Americans who lived in the vicinity of the project site can be found in Section 5.14, Tribal Cultural Resources. See Section 5.5, Cultural Resources – Historical Resources for a description of the history of the project site.

TERMINAL PLEISTOCENE (BEFORE ~11,500 B.P.)

Paleoindian/Paleocoastal Tradition

Any discussion of human occupation of coastal areas during the Terminal Pleistocene must be prefaced with an understanding that sea level rise during this period of severely shifting climate inundated many kilometers of shoreline worldwide and along Southern California coastlines specifically, submerging an unknown number of archaeological sites. Therefore, any evidence that we do have of human occupation in what are now coastal settings is likely only a small fraction of what originally existed. Recent studies using offshore core samples have made important progress in reconstructing paleoshorelines and the paleoenvironment of Southern California's Terminal Pleistocene coast.

The earliest evidence for human occupation in Southern California is found on the northern Channel Islands, where multiple Terminal Pleistocene sites have been identified and dated in the past couple decades, firmly establishing the presence of early coastal-adapted people in the region. On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago. Recent excavations and radiometric dating of multiple archaeological assemblages on San Miguel, Santa Rosa, and Santa Cruz Islands document Paleoindian technologies, subsistence strategies, and

seasonality of site occupation during the latter part of the Terminal Pleistocene (~11,700 B.P.), with similarities to the Western Stemmed Tradition found across much of western North America.

Finely crafted chipped stone crescents like those recorded on the northern Channel Islands as part of the Paleocoastal toolkit were also found in surficial contexts on San Nicolas Island, suggesting an earlier occupation for the southern Channel Islands as well. It is possible that similarly early sites were also present on the mainland California coast; however, the rate and degree of development beginning with Spanish colonization and continuing to the present has likely destroyed most early sites along the California mainland coast. Nevertheless, three fluted points representing the Clovis culture have been found in Southern California mainland coastal areas, including one in Santa Barbara County, one in Los Angeles County near Malibu, and one in El Morro Canyon, in what is now Crystal Cove State Park in Orange County. Additionally, numerous fluted projectile points of the Clovis and Folsom Traditions have been reported from inland contexts in central and southern California.

Two sites in the Ballona area, LAN-61 and LAN-63, are believed to include occupations from this time period based on diagnostic artifacts (crescents and stemmed points). However, recent data recovery excavations and analyses, including numerous radiocarbon dates, failed to provide incontrovertible evidence that people were using this area during the Paleocoastal period, although this lack of radiocarbon dates does not necessarily negate the possibility that an earlier occupation occurred and might be uncovered in the future.

EARLY HOLOCENE (~11,500 TO ~7000 B.P.)

Horizon I: Early Man

Mainland sites attributed to Horizon I generally indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas and a greater emphasis on large-game hunting inland. Fundamental elements of lithic tool technology described by Wallace (1955) for this period include numerous scrapers, choppers, chipped and notched crescents, and large blades and points. Wallace also describes clamshell and bone beads, along with an absence of seed-grinding implements from the type site for this period, Malaga Cove. Several sites in Orange and San Diego Counties contain components that date to between 9,000 and 10,000 years ago, and radiocarbon dates from the Goleta Slough area in Santa Barbara County indicate occupations spanning ca. 9300 to 8400 cal B.P. (ca. 7300–6400 B.C.) with a primary subsistence focus on lagoon/bay shellfish.

Horizon II: Millingstone

The Millingstone horizon corresponds to the Early Holocene when rising sea levels continued to encroach on coastlines, although the global climate was slowly stabilizing. Set during a warmer and drier climatic regime than the previous horizon, the Millingstone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals, although in coastal areas where archaeological assemblages have been preserved, there is also ample evidence of marine resource use during this time as well. The importance of seed processing is apparent in the dominance of stone grinding implements in archaeological assemblages from this period, namely milling stones (metates) and hand stones (manos).

Millingstone assemblages are characterized by the extensive use of milling implements (particularly manos and metates) and mullers along with scraper planes, choppers, and core tools and a general lack of finely crafted projectile points, although leaf-shaped points believed to be darts are present. The general lack of faunal remains along with bone and shell tools at some sites dated to this period have led researchers to suggest a stronger reliance of plant food resources (i.e., seeds) with only a minor focus on hunting. Several sites have been described for this horizon throughout Southern California, including

Little Sycamore in Ventura, Porter Ranch in San Fernando, and the La Jolla shell mounds in San Diego. Los Angeles County sites with Millingstone components include Malaga Cove (Level 2, LAN-138), the Tank Site (LAN-1) in Topanga Canyon, the La Brea Tar Pits Archaeological Site (LAN-159/H), the Zuma Creek Site (LAN-174), the Sweetwater Mesa Site (LAN-267), the Shobhan Paul Site (LAN-958); and the Parker Mesa site (LAN-215). Primary sites with Millingstone components in Orange County include Bolsa Chica (ORA-83), ORA-64, and the Landing Hill Site.

MIDDLE HOLOCENE (~7000 TO 4000 B.P.)

Horizon III: Intermediate

This horizon corresponds with the Middle Holocene and early Late Holocene time periods geologically and marks the point when current shorelines were established in most parts of the world. Consequently, evidence for marine resource use appears to have increased after 5,000 to 6,000 years ago.
The Intermediate horizon is characterized by important changes in almost all aspects of culture, including settlement patterns, economic activities, mortuary practices, and technology. During this period, economic practices shifted toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting, including side-notched projectile points, are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard-shelled seed resources to the increasing importance of fleshier fruits like the acorn. Bow and arrow technology is first seen toward the end of the Intermediate periods (ca. 1500–1000 B.P.) when it appears to have spread to the Southern California coast from the north and east.

Technological markers described for this horizon consist of basket-hopper mortars, mortars and pestles, diverse and plentiful chipped stone assemblages with greater numbers and a wider variety of projectile point types, and bone and antler tools, which are present to some degree but not in the quantity seen during later phases, along with occasional use of bitumen (asphalt) and steatite. Faunal assemblages often include terrestrial mammals representing wild game, along with some marine mammal bones and often high densities of shellfish remains.

The Middle Holocene also marks a time of cultural innovation in the archaeological record of California. Significant cultural developments are seen in the increasing formation of larger settlements, the intensification of long-distance trade networks including distinct cultural spheres throughout western North America, and the elaboration of art and personal aesthetics (e.g., shell and stone pendants and increasing variety of shell bead types and styles).

There is also evidence suggesting migrations into coastal Southern California by desert peoples from the east during the Intermediate period, based on changes in mortuary practices (i.e., cremations), the presence of desert tanged projectile points, and increased numbers of stone as opposed to shell beads. This question has been discussed by several archaeologists with most suggesting an arrival date of approximately 1500 cal B.P., although some argue for a much earlier migration at around 3500 cal B.P., which coincides with the Millingstone/Intermediate period transition. Of course, it is possible, and even likely, that multiple migrations of various scales occurred over the course of hundreds, or thousands, of years.

LATE HOLOCENE (~3000 B.P. TO SPANISH COLONIZATION)

Horizon IV: Late Prehistoric

The Late Prehistoric period extended from the end of the Intermediate period (~A.D. 500) until Spanish colonization, marked by the Cabrillo expedition in A.D. 1542. This period is characterized by extensive population growth and a large increase in the number and types of sites along the Southern California coast. During this period, there was a significant increase in the population of Native peoples in Southern California accompanied by the advent of larger, more permanent villages, particularly at the mouths of large mainland coastal canyons and drainages with year-round water supplies. Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round, although the populations of these villages may have also increased seasonally. The development of social differentiation is indicated during this period by the complexity of site layouts with numerous complex features and the highly variable nature of mortuary treatments and burial grounds.

During the Late Prehistoric period, there was an increase in the use of plant food resources in addition to an increase in terrestrial and marine mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely flaked projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of composite bone gorges and circular shell fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments such as beads made from shell, bone, and stone. Olivella shell bead styles include a variety of wall and callus beads in addition to the previous spire-lopped, and cup beads. There was also an increased use of asphaltum, or bitumen, for waterproofing basketry and caulking canoes and as an adhesive.

Technological markers of this horizon include the increased use of the bow and arrow, stemless points with concave or convex bases, steatite containers, widespread use of asphaltum as adhesive, and increased abundance and types of bone tools, as well as shell, bone, and stone ornaments. Wallace also describes notable distinctions between northern and southern groups during this period, including less pottery north of Orange County, where steatite vessels were more prevalent, and the presence of portable mortars and pestles and basket-hopper slabs in the north with bedrock mortars and milling stones being more prevalent in the San Diego area.

By A.D. 1000, fired clay smoking pipes and ceramic vessels were being used at some sites. The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed, or that occupants were trading with neighboring groups to the south and east for ceramics. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that was caulked with bitumen (asphaltum) and functioned in the same capacity as ceramic vessels.

5.4.1.2 Existing Cultural Resources

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

On February 28, 2022, SWCA received the results of a confidential search of the California Historical Resources Information System (CHRIS) records conducted by the South Central Coastal Information

Center (SCCIC) on the campus of California State University, Fullerton (SCCIC 2022). The CHRIS records search was conducted to identify previously documented cultural and potential tribal cultural resources in and within a 0.5-mile radius of the project site, and to aid in the assessment of resource sensitivity. In addition, archival research included a literature review of archaeological, ethnographic, and historical sources to identify information relevant to the project site, including sources specific to the history of Rancho La Brea and La Brea Tar Pits (Millington and Dietler 2023). The CHRIS records search identified a total of 18 cultural resources within a 0.5-mile radius. Of these cultural resources, four included archaeological components (Table 5.4-1).

Table 5.4-1. Archaeological Sites within 0.5 mile of the Project Site

Primary No.	Trinomial	Name(s) or Designations	Time Period	Resource Type	Recording Year (Affiliation: Name)	Proximity to Project Site
P-19-000159	LAN-159*	La Brea Tar Pits (Archaeological Site)	Multicomponent	Site	1949 (R.F. Heizer)	Within
P-19-001261	LAN-1261H*	Shin'en Kan Pavilion	Historic	Site	1986 (UCLA: Roy Salls)	Outside: less than 10 m west
P-19-002964	LAN-2964H	Park La Brea	Historic	Site	2002 (Greenwood & Associates: Alice Hale)	Outside: 500 m north
P-19-003045	LAN-3045H	The Grove at Farmer's Market and the Gilmore Adobe	Historic	Building, Structure, Site	2002 (Cogstone: Sara Dietler, Sherri Gust, and Sara Alarcon)	Outside: 640 m north
P-19-171007	–	Hancock Park–La Brea	Historic	Site	1982 (Westec Services: T. Jaques and N. Michali)	Within

* The components of LAN-1261H will be merged with those of LAN-159 and the former site number will be deaccessioned. The revised site trinomial is expected to henceforth be known as LAN-159/H.

As shown in Table 5.4-1, previously recorded resources that overlap the project site include two archaeological sites (LAN-159 and LAN-1261H), referenced herein as the La Brea Tar Pits Archaeological Site (LAN-159/H) and Hancock Park–La Brea (P-19-171007), which does not specifically have an archaeological component, but is referenced here because of its relevance to broader resource management considerations (Millington and Dietler 2023). See Section 5.5, Cultural Resources – Historical Resources for a detailed discussion of the historic resources inventory results.

LAN-159/H contains the material remains of Native American use between at least 10,000 to 3,200 years ago, and historical refuse from as long ago as the 1860s and through the twentieth century (Millington and Dietler 2023). In terms of the Native American component of the La Brea Tar Pits Archaeological Site, 77 Native American artifacts were recovered, in addition to the skeletal remains of a female Native American and a domesticated dog. The date range for the Native American component is based on radiocarbon dating on samples of the young female remains dated to 10,200–10,250 cal B.P., a wooden atlatl foreshaft dated to 4536–5583 cal B.P., and a domesticated dog dated to 3250–3400 cal B.P. The historical component of the site (formerly LAN-1261H) was recovered from a single feature recorded in 1986. The feature was composed of various pieces of historical refuse items with manufacturing dates that indicated a date as old as the 1860s.

The CHRIS search also identified a listing for P-19-171007, which is separate from either of the archaeological sites recorded within Hancock Park, and is associated with the designation California Historical Landmark (CHL) No. 170, known as Hancock Park–La Brea. The original designation as a CHL in the 1930s defined the resource in a general way that highlights the importance of the site to the

study of paleontology, but also recognizes the Native American archaeological components, history of Rancho La Brea, and the role of the Hancock family in developing Hancock Park and supporting the scientific research. The site was first listed in the CHRIS as P-19-171007 either just before or in conjunction with a National Register of Historic Places (NRHP) evaluation completed in the early 1980s. The NRHP eligibility determination provided clarification of the boundary, constituents, and significance based on an established set of criteria. The NRHP evaluation ultimately found the site eligible under Criterion A for the role played in the history of paleontology in North America, but also for having played a significant part in the development of science at an international level. While this determination ultimately established the significance based specifically on its paleontological history, the explicitly archaeological and broadly historical components were still considered in both the original landmark designation and in the updated recording for the NRHP evaluation. Accordingly, the resource is discussed here as a type of cultural resource for purposes of the current analysis. And in keeping with this prior association between the landmark designation and listing in the CHRIS, the designation of CHL No. 170 and the NRHP eligibility determination made for P-19-171007 will be considered in tandem for this report as they are largely referring to the same resource, the latter being an updated recording of the former. The boundary for the Hancock Park–La Brea landmark designation was originally defined as the 23-acre footprint of Hancock Park, including the space occupied by the Los Angeles County Museum of Art, which also corresponds to the boundary for P-19-171007.

SACRED LANDS FILE SEARCH

The Native American Heritage Commission (NAHC) Sacred Lands File search produced negative results, indicating that no sacred lands have previously been recorded on the property (NAHC 2022). The NAHC provided a list of Native American contacts and suggested contacting them to provide information on sacred lands that may not be listed in the Sacred Lands File. The County of Los Angeles (County) conducted informational outreach to tribes across Los Angeles County for the project, as well as formal consultation with tribes included on the County's Assembly Bill 52 consultation list which requested to proceed with consultation. The responses to this outreach and consultation confirmed the sensitivity of existing archaeological discoveries and the potential for additional Native American materials to be preserved as buried deposits within the project site. A detailed discussion of the County's Native American consultation process is included in Section 5.14, Tribal Cultural Resources.

PHASE 1 AND PHASE 2 INVESTIGATION

After completion of the initial phase of background research, an archaeological field investigation occurred that focused on three key areas within the project site. The field investigation was conducted using shovel test pits and manual auger units—designated STP and AUG—that were placed at 10-meter intervals within sample testing areas. The locations were determined based on the following four criteria:

1) the location of new project components that would have the greatest degree of associated ground disturbance—i.e., the new museum facility and parking lot;
2) current open space that avoids obstructions from current developments, including artificial fill associated with the extant museum building;
3) areas of highest Native American and historical archaeological sensitivity as determined from preliminary background research; and
4) avoiding paleontologically sensitivity or protected areas, including any surface asphalt seeps.

During the field investigation, artifacts, fossilized bone, and some environmental samples were collected. The collected materials were stored during fieldwork and later analyzed in the laboratory at the George C. Page Museum (Page Museum) and will remain in the Natural History Museums of Los Angeles

County collections. Based on Phase 1 and Phase 2 investigations at the site, there is potential for previously undocumented cultural resources to be located within the project site (Millington and Dietler 2023).

5.4.2 Regulatory Setting

The following section describes the regulations that are most relevant to the archaeological resources that may be affected by the project. Additional regulations that are relevant, but less directly so, are described in related sections of this EIR, including Section 5.5, Cultural Resources – Historical Resources, and Section 5.14, Tribal Cultural Resources.

5.4.2.1 Federal

There are no federal regulations related to cultural resources applicable to the project.

5.4.2.2 State

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely affected by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.1). Answering this question is a two-part process: first, the determination must be made whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of any resources.

According to State CEQA Guidelines, 14 California Code of Regulations (CCR) 15064.5, for the purposes of CEQA, historical resources are:

- A resource listed in, or formally determined eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR) (PRC Section 5024.1, 14 CCR 4850 et seq.).
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historic resources survey meeting the requirements of PRC Section 5024.1(g).
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historical resource under CEQA) if the resource meets the criteria for the CRHR (as defined in PRC Section 5024.1, 14 CCR 4852).

Resources nominated for the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) do not meet NRHP criteria may still be eligible for the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (State CEQA Guidelines, 14 CCR 15064.5[b]).

State CEQA Guidelines specify that a "substantial adverse change in the significance of an historical resource means 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" (State CEQA Guidelines, 14 CCR 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for the NRHP, CRHR, or local register. In addition, pursuant to State CEQA Guidelines, 14 CCR 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

Archaeological resources under CEQA may be significant either as a historical resource or as a unique archaeological resource. PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for the CRHR. According to PRC Section 5024.1(c), a resource—either an individual property or a contributing element of a historic district—may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated for the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity do not meet NRHP criteria may still be eligible for the CRHR. While all sites are evaluated according to all four of the CRHR criteria, the eligibility for archaeological resources is typically considered under Criterion 4. Most

prehistoric archaeological sites are lacking identifiable or important association with specific persons or events of regional or national history (Criteria 1 and 2), or lack the formal and structural attributes necessary to qualify as eligible under Criterion 3.

An archaeological site may be considered significant if it displays one or more of the following attributes: chronologically diagnostic, functionally diagnostic, or exotic artifacts; datable materials; definable activity areas; multiple components; faunal or floral remains; archaeological or architectural features; notable complexity, size, integrity, time span, or depth; or stratified deposits. Determining the period(s) of occupation at a site provides a context for the types of activities undertaken and may well supply a link with other sites and cultural processes in the region. Further, well-defined temporal parameters can help illuminate processes of culture change and continuity in relation to natural environmental factors and interactions with other cultural groups. Finally, chronological controls might provide a link to regionally important research questions and topics of more general theoretical relevance. As a result, the ability to determine the temporal parameters of a site's occupation is critical for a finding of eligibility under Criterion 4 (information potential). A site that cannot be dated is unlikely to possess the quality of significance required for CRHR eligibility or be considered a unique archaeological resource. The content of an archaeological site provides information regarding its cultural affiliations, temporal periods of use, functionality, and other aspects of its occupation history. The range and variability of artifacts present in the site can allow for reconstruction of changes in ethnic affiliation, diet, social structure, economics, technology, industrial change, and other aspects of culture.

CALIFORNIA HISTORICAL LANDMARKS

CHLs are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. The specific standards now in use were first applied in the designation of Landmark No. 770. CHLs numbered 770 and above are automatically listed in the CRHR. To be designated as a CHL, a resource must meet at least one of three criteria, have the approval of the property owner(s), be recommended by the State Historical Resources Commission, and be officially designated by the Director of California State Parks. The three criteria are:

- The first, last, only, or most significant of its type in the state or within a large geographic region (northern, central, or southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

CALIFORNIA POINTS OF HISTORICAL INTEREST

If a site is primarily of local interest, it may meet the criteria for the California Point of Historical Interest (CPHI) program. CPHIs are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. CPHIs designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historical resource may be designated as both a landmark and a point. If a point is subsequently granted status as a landmark, the point designation will be retired.

TREATMENT OF HUMAN REMAINS

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code Section 7050.5. More specifically, remains suspected to be Native American are treated under the State CEQA Guidelines at 14 CCR 15064.5. PRC Section 5097.98 illustrates the process to be followed if human remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner:
  1104 North Mission Road
  Los Angeles, California 90033
  323-343-0512 (8 a.m. to 5 p.m. Monday through Friday) or
  323-343-0714 (after hours, Saturday, Sunday, and holidays)
- If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the NAHC.
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.
- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.

If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

5.4.2.3 County of Los Angeles

COUNTY OF LOS ANGELES 2035 GENERAL PLAN

The County of Los Angeles 2035 General Plan (2035 General Plan) has provisions and guidelines relating to the protection of archaeological and historical resources. These guidelines require that a literature search for valid archaeological surveys and resources be conducted and, if this search indicates a high possibility for a resource to be impacted, that a qualified archaeologist determine the value of possible finds and make recommendations to their preservation or deposition. These guidelines all require that, if a determination to salvage the site has been made, adequate salvage of the site be allowed, prior to grading (County of Los Angeles 2015).

The County's 2035 General Plan establishes the following six policies applicable to the project:

> ***Policy C/NR 14.1*****:** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
>
> ***Policy C/NR 14.2*****:** Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
>
> ***Policy C/NR 14.3*****:** Support the preservation and rehabilitation of historic buildings.
>
> ***Policy C/NR 14.4*****:** Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
>
> ***Policy C/NR 14.5*****:** Promote public awareness of historic, cultural, and paleontological resources.
>
> ***Policy C/NR 14.6*****:** Ensure that proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

The County of Los Angeles (the County) recognized the potentially adverse impact that the County's 2035 General Plan may have on archaeological resources. This has resulted in deference to historical resources, with the plan's emphasis on rehabilitation that is more likely to preserve historic resources in areas that are being revitalized. However, the plan also acknowledges the negative effects that are possible as structures are replaced or modernized, or as new structures are constructed on vacant lots within historically significant neighborhoods (County of Los Angeles 2015).

5.4.2.4 City of Los Angeles

While the project site is located within the city of Los Angeles, it is owned by the County of Los Angeles. Accordingly, the project is subject to the regulatory controls of the County of Los Angeles and not the City of Los Angeles. Nonetheless, the following City of Los Angeles (City) guidance related to archaeological resources are provided for informational purposes.

CITY OF LOS ANGELES GENERAL PLAN CONSERVATION ELEMENT

The City of Los Angeles General Plan (City General Plan), originally adopted in 1974, is a comprehensive long-term document that provides principles, policies, and objectives to guide future development and to meet the existing and future needs of the City. A number of these principles, policies, and objectives serve to mitigate environmental effects. The City's General Plan includes the seven state-mandated elements, including the Conservation Element, which specifically addresses cultural, historical, archaeological, and paleontological resources. Section 3 of the Conservation Element recognizes the City's responsibility for identifying and protecting its archaeological and paleontological resources, and Section 5 recognizes the City's cultural and historical heritage (City of Los Angeles 2001). In these sections, the Conservation Element establishes objectives to protect important archaeological and paleontological resources, as well as its cultural and historical sites and resources for historical, cultural, research, and community educational purposes. It establishes corresponding policies to continue to protect these resources potentially affected by proposed land development, demolition, or property modification activities, including the following:

- **Archaeological and Paleontological Objective:** Protect the city's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes.
- **Archaeological and Paleontological Policy:** Continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition, or property modification activities.
- **Cultural and Historical Objective:** Protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.
- **Cultural and Historical Policy:** Continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition, or property modification activities.

SURVEYLA

SurveyLA is a citywide historic resource survey conducted for Los Angeles that is managed and implemented by the City of Los Angeles Office of Historic Resources. Since its launch in 2007, SurveyLA staff, volunteers, and consultant teams have developed multiple-property documentation-driven historic context statements for themes and property types throughout Los Angeles. These contexts define associated themes, property types, eligibility standards, character-defining features, and integrity considerations to be used when evaluating properties. The findings are organized geographically by community planning areas and the results published online at HistoricPlacesLA.org.

The project site is within the Wilshire Community Planning Area (Architectural Resources Group [ARG] 2015a), and La Brea Tar Pits were designated as a historic district in ARG's inventory (ARG 2015b:957–959).

5.4.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the State CEQA Guidelines. A project would result in significant adverse impacts related to archaeological resources if it would:

a) Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.

b) Disturb any human remains, including those interred outside of dedicated cemeteries.

5.4.4 Impact Assessment Methodology

When a project will impact an archaeological site, the Lead Agency must first determine whether the site is a historical resource. A substantial adverse change in the significance of a historical resource would occur if the project results in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. The significance of a historical resource is materially impaired when a project:

- demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and justify its inclusion in, or eligibility for inclusion in, the CRHR;
- demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in a historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and justify its eligibility for inclusion in the CRHR as determined by a Lead Agency for the purposes of CEQA.

Based on background review of the project site, one previously recorded resource overlaps the project site: the La Brea Tar Pits Archaeological Site (LAN-159/H). LAN-159/H contains the material remains of Native American use from at least 10,000 to 3,200 years ago, and historical refuse from as long ago as the 1860s and through the twentieth century. It is recommended that LAN-159/H is eligible for the CRHR under Criterion 4 because it possesses sufficient archaeological data with the potential to contribute important information to history and it retains integrity. The Native American component of the site also appears to meet the definition of a unique archaeological resource (Millington and Dietler 2023). In total, 77 Native American artifacts have been recovered from LAN-159/H, as well as skeletal remains of a female Native American and a domesticated dog. The historical component of LAN-159/H consists of more than 1,000 pieces of refuse comprising a variety of mostly fragmented materials such as glass, metal, wood, and ceramic. Background review and fieldwork efforts are described in Section 5.4.1.2, Existing Cultural Resources, above.

Hancock Park–La Brea was designated as CHL No. 170 in the 1930s, but before a specific set of criteria for landmark status had been established. The CHL listing was incorporated into the CHRIS as P-19-171007 and the site record was updated in the 1980s as part of an evaluation for the NRHP. For the

role played in the history of paleontology, P-19-171007 was determined eligible for the NRHP under Criterion A. Under PRC Section 5024.1(d), resources eligible for the NRHP are automatically included in the CRHR, making P-19-171007 eligible for the CRHR under Criterion 1. Based on the prior determinations, P-19-171007/CHL No. 170 meets the definition of a historical resource under CEQA. Despite the alterations to the physical setting within the resource boundary, the Tar Pits grounds remain the focus of active research and education through the work at the Page Museum. The significance of the site is retained as the location where paleontological discoveries were made that influenced the development of paleontology in North America. The historical significance continues to be conveyed through the outdoor exhibits, curation of the existing collection, and publicly displayed interpretive materials.

5.4.5 Environmental Impact Analysis

a) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to state CEQA Guidelines Section 15064.5?

The project site contains LAN-159/H, which is CRHR-eligible under Criterion 4 because it possesses sufficient archaeological data with the potential to contribute important information to history and it retains integrity. In addition to previously recorded resources within the project area, Phase 1 and Phase 2 investigations at the site determined that there is potential for previously undocumented cultural resources to be located within the project area (Millington and Dietler 2023).

The site also contains CHL No. 170 and P-19-171007, an NRHP/CRHR-eligible site recognized for the historical importance of the fossil discoveries to the practice of paleontology in North America. Substantial aspects of the proposed project are aimed at furthering and enhancing what has been recognized in the CHL listing and NRHP determination. This includes the status of La Brea Tar Pits as the locality for significant Pleistocene fossils that remain preserved, are currently being recovered, curated, analyzed, and presented in professional and public settings. And it includes Hancock Park as the historical location of fossil excavations that had a significant influence on the field of paleontology and our understanding of the Pleistocene Epoch.

CONSTRUCTION

The construction of a new museum and outdoor facilities, renovation of the existing Page Museum and exhibits, and other components of the project would enhance these very aspects of the park, both through its design and by providing additional facilities to conduct these activities. By maintaining open space for recreational uses in the areas adjacent to those dedicated to fossil excavation and analysis, these elements of the site's significance will continue to be conveyed to the public. Therefore, the project would not result in a substantial change in the significance of CHL No. 170 and P-19-171007.

The project would result in renovation and upgrades throughout the Tar Pits complex, including the 13-acre portion of Hancock Park and the Page Museum. At the time of preparation of this report, final engineering, design, and grading plans for the project had not been finalized. Because the project design is at a preliminary stage, the level of detail needed to determine the precise depth and extent of ground disturbance is not known. However, the level of design that has occurred to-date allows for a general characterization of the overall ground disturbance and excavation that would be necessary for the project. For impact assessment purposes, the design team for the project, working with the Los Angeles County Museum of Natural History Foundation and the County, estimates that, at most, the project would require excavations 6 to 10 feet below ground, potentially involving 53,000 cubic yards of cut/export and 37,000 cubic yards of imported fill.

Proposed ground-disturbing activities would have the potential to disturb LAN-159/H as well as unknown associated archaeological components of the site that may be present within the proposed area of disturbance. Based on the above analysis, the project's construction impacts could be *significant*.

OPERATION

Operation of the project would not result in any ground-disturbing activities such as grading or excavation outside of the existing research sites; therefore, there is no potential to encounter, alter, or disturb archaeological resources. No impact would occur during project operation.

CR-ARCH Impact 1	
During project construction, the project could cause a substantial adverse change in the significance of an unknown archaeological resource pursuant to State CEQA Guidelines Section 15064.5. Construction impacts could be significant. Project operation would not cause a substantial adverse change in the significance of an unknown archaeological resource pursuant to State CEQA Guidelines Section 15064.5. No operational impacts would occur. (CEQA Checklist Appendix G Threshold v. b)	
Mitigation Measures	
CR-ARCH/mm-1.1	*Retain a Qualified Archaeologist.* *a. Prior to initiating any ground-disturbing activities, a Qualified Archaeologist shall be retained. A Qualified Archaeologist is defined as one who meets the Secretary of the Interior's (SOI) Standards for professional archeology and those defined for a Principal Investigator by the Society for California Archaeology (SCA). The qualifications shall be presented as part of a resume for at least one primary point of contact who will act in capacity as the Qualified Archaeologist but also other key staff who may serve in this role. The resume shall demonstrate their SOI and SCA qualifications and shall be subject to approval by the County.* *b. Ground-disturbing activities shall include excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or a similar activity at the project site. The Qualified Archaeologist shall carry out and ensure proper implementation of the mitigation measures and regulatory compliance related to archaeological resources and, where appropriate, tribal cultural resources during the project. The Qualified Archaeologist shall be responsible for establishing a meeting schedule with Page Museum curators and collections managers during implementation of the project to address any outstanding questions or concerns that arise during mitigation efforts to ensure effective communication and coordination.* *c. No more than 21 days before ground-disturbing activities for the project commence, the Qualified Archaeologist shall submit a letter confirming that they have been retained consistent with the terms of the CR-ARCH/mm-1.1 and attach the professional resumes for all staff who may be acting in the capacity of the Qualified Archaeologist.*

CR-ARCH Impact 1	
CR-ARCH/mm-1.2	*Prepare an Archaeological and Tribal Cultural Resources Management Plan (AR-TCR Management Plan).* *a. Prior to commencing ground-disturbing activities, an AR-TCR Management Plan shall be prepared by the Qualified Archaeologist and submitted to the Page Museum curators and the NHMLAC Curator of Anthropology, who shall review and approve the AR-TCR Management Plan on behalf of the County. The AR-TCR Management Plan shall be prepared in conformance with Public Resources Code Section 5024.1, Title 14 California Code of Regulations, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1.* *b. The AR-TCR Management Plan shall include but not be limited to the following elements:* *i. Historical context statement, research design, the specific types of archaeological sites likely to be encountered.* *ii. Construction worker training program (described in CR-ARCH/mm-1.3).* *iii. Monitoring protocol for ground-disturbing activities that includes a framework for assessing the geoarchaeological setting to determine whether sediments capable of preserving archaeological remains are present in substantial conformance with the Archaeological and Tribal Cultural Resources Assessment and include a protocol for identifying the conditions under which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. The duration and timing of the monitoring shall be determined based on the rate of excavation, geoarchaeological assessment, and, if present, the quantity, type, and spatial distribution of archaeological resources identified.* *iv. Limited program of archaeological presence/absence testing within naturally deposited asphaltic or non-asphaltic alluvial sediments before they are mechanically excavated. In particular, the area of the new museum, promenade, and parking lot expansion shall be further investigated. These investigations shall be conducted via a combination of archaeological units, hand tools, and mechanical trenching. The methods used to conduct the limited archaeological testing shall be coordinated with contractors to ensure that sufficient time is afforded to evaluate the significance <u>of</u> any identified resources, and if they are found to be significant, time to develop and implement a treatment plan appropriate to the type of resource. The timing of any such efforts shall be conducted in localized areas so that delays to project earthwork activities are minimized while allowing archaeological materials to be identified in a manner that retains the scientific integrity of the discovery.* *v. An approach to evaluate newly identified site components, if applicable, as contributors to the significance of LAN-159/H as a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g). If any archaeological resources are identified and are found not to be significant or do not retain integrity, then they shall be recorded to a level sufficient to document the contents and condition.* *vi. Potential treatment plans to be implemented in the event a newly discovered archaeological resource is determined by the Qualified Archaeologist to contribute to the significance of the site as a historical resource based on California Register of Historical Resources criteria or a unique archaeological resource in substantial conformance with the Archaeological and Tribal Cultural Resources Assessment. The AR-TCR Management Plan shall require that if the treatment plans outlined therein are found to be infeasible or other alternatives are proposed, the Qualified Archaeologist shall coordinate with the project proponent and the County*

CR-ARCH Impact 1	
	to amend the AR-TCR Management Plan with a formal treatment plan that would reduce impacts to the resource(s). The treatment plans stated in the AR-TCR Management Plan or prepared after the discovery of a historical resource, shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment and if it is determined avoidance is not feasible, treatment may include but not be limited to any of the following depending on the type of resource and the significance evaluation: • *Native American archaeological site components. Data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant where significance is determined under CRHR Criterion 4 or as a unique archaeological resources and integrity is retained. Additional treatment measures to mitigate potentially significant impacts to the component as a tribal cultural resource, which is to be carried out in consultation with the Tribal Consultants and after considering the status of the discovery as a tribal cultural resource.* • *Historical archaeological site components. If a historical archaeological component of the site is present and found to retain integrity, data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant.* *vii. Discovery and processing protocol for inadvertent discoveries of archaeological resources that are encountered when an Archaeological Monitor is not present.* *viii. A process by which recovered materials will be prepared for curation at the Page Museum or the Research and Collections Department at the Natural History Museum of Los Angeles County ~~at the Los Angeles Exposition Park~~, as directed by Page Museum curators and collections managers, and in consultation with Tribal Consultants. The curation shall ensure their long-term preservation and allow access to interested scholars and shall be done at the expense of the County and/or the Foundation. If the materials are Native American in origin or any item of cultural patrimony, the manner of their handling and long-term curation may require additional consultation with the appropriate Native American community that shall be determined as part of a tribal consultation process to be conducted by the County who shall be responsible for the disposition of these materials.* *ix. The AR-TCR Management Plan shall summarize the requirements for tribal coordination ~~during~~ in the event of an inadvertent discovery of Native American archaeological resources, including the applicable regulatory compliance measures or conditions of approval for the inadvertent discovery of archaeological resources to be carried out in concert.*
CR-ARCH/mm-1.3	*Conduct an archaeological awareness training.* *a. The Qualified Archaeologist or a designee working under their direction shall provide training to on-site project personnel who are responsible for overseeing ground-disturbing activities (i.e., a foreman or site supervisor) and machine operators. The initial training shall be conducted prior to the start of ground-disturbing activities in the project site. The training shall brief the crews on the regulatory compliance requirements and applicable mitigation measures that must be adhered to during ground-disturbing activities for the protection of archaeological resources. As an element of the worker training, the Qualified Archaeologist or their designee shall*

CR-ARCH Impact 1	
	advise the construction crews on proper procedures to follow if an unanticipated archaeological resource is discovered during construction, including the authority of Archaeological Monitor(s) to temporarily halt or redirect work away from such a discovery. Workers shall be shown examples of the types of archaeological resources that would require notification of the archaeologist, if encountered. The workers shall be provided with contact information for the Qualified Archaeologist and their designee(s) as part of a brief handout summarizing the critical components of the training. Once the ground-disturbing activities have commenced, the need for additional or supplemental worker trainings shall be determined by the Qualified Archaeologist based upon consultation with project personnel. *b. Within five days of completing each training, a list of those in attendance shall be provided by the Qualified Archaeologist to a point of contact designated by the Museum of Natural History.*
CR-ARCH/mm-1.4	*Monitoring for Archaeological Resources.* *a. At least one Archaeological Monitor working under the direction of the Qualified Archaeologist shall be present during ground-disturbing activities to implement the AR-TCR Management Plan. The Archaeological Monitor shall have the authority to temporarily halt or redirect construction activities when an archaeological resource, suspected resource, or archaeologically sensitive sediments are encountered, as determined by the Qualified Archaeologist in consultation with the Page Museum curators. The presence/absence testing protocol shall be implemented within the asphaltic alluvial sediments that have elevated archaeological sensitivity as stipulated in the AR-TCR Management Plan and conducted in concert with Tribal Monitors and applicable tribal cultural measure measures. The Qualified Archaeologist and Archaeological Monitor shall document the results of the presence/absence testing and allow ground-disturbing activities to proceed in the sediments with archaeological sensitivity once the Archaeological and Tribal Monitors have confirmed the absence of resources. The Archaeological Monitor shall continue to monitor the ground-disturbing activities with the depths assessed by the presence/absence testing. Once the Archaeological Monitor identifies sediments or depths of excavation that are not capable of containing or are unlikely to contain archaeological resources, a corresponding reduction of monitoring coverage would be appropriate, and may be recommended by the Qualified Archaeologist. The Archaeological Monitor shall complete a daily written log documenting construction activities and observations, which shall be included in the final report. The number of Archaeological Monitors shall be determined by the County, based on the scale of ground-disturbing activities and a reasonable degree of effort required to implement the mitigation measures.* *b. In the event that potentially significant archaeological resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [25 feet]) shall stop until the Qualified Archaeologist can evaluate the significance of the find, with input from the tribal monitor if the discovery is affiliated with Native Americans and is also being assessed as tribal cultural resources. Construction activities may continue in other areas in coordination with the Qualified Archaeologist and, if applicable, Tribal Monitors.* *c. At the conclusion of all ground-disturbing activities the Qualified Archaeologist shall prepare a technical report documenting the methods and results of all work completed under the AR-TCR Management Plan, including, if any, treatment of archaeological materials, results of artifact processing, analysis, and research, and evaluation of the resource(s) for the California Register of Historical Resources. The format and content of the report shall follow the California Office of Historic Preservation's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format. Any archaeological resources identified shall be documented on appropriate California Department of Parks and Recreation 523-Series Forms. The report shall be prepared under the supervision of a Qualified*

CR-ARCH Impact 1	
	Archaeologist and submitted to curators of the Page Museum for initial review (on behalf of the Museum of Natural History, as the County departmental unit), and final copies shall be submitted to the County. The report shall be completed with 12 months of completion of the monitoring, unless other arrangements are required, as documented in writing and approved by the County, given the nature of the discovery, in which case a revised date can be determined through consultation with the Museum of Natural History. The final draft of the report shall be submitted to the South Central Coastal Information Center and the Tribal Consultants.
Impacts Following Mitigation	
Upon implementation of Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4 to address inadvertent discovery of unknown archaeological resources, construction impacts would be reduced to less than significant. No operational impacts would occur.	

CR-ARCH/mm-1.2b would require preparing an Archaeological Resource-Tribal Cultural Resource Management Plan (AR-TCR Management Plan) that provides a framework and protocol by which additional measures for archaeological and tribal cultural resources would be implemented, as well as a procedure to follow if a resource is determined to satisfy significance criteria. The measure specifies the essential elements required for the AR-TCR Management Plan so that the monitoring of ground-disturbing activities would be conducted in a manner consistent with industry best practices and professional archaeological standards, adjusted to address the specific nature of the archaeological site, which is composed of a patchily distributed components that have varying degrees of sensitivity correlating with different types of sediments. Specifically, CR-ARCH/mm-1.2b includes stipulations requiring a proactive identification process be integrated into the monitoring effort, in addition to the close inspection of ground-disturbing activities while they are occurring.

It is not practical to prepare the AR-TCR Management Plan at this early stage in the project planning effort. Grading plans and construction drawings have not been prepared, and the specific phases of the project implementation have not been determined. Preparing the AR-TCR Management Plan using more advanced project designs and based on an anticipated schedule for the types of construction activities would allow the AR-TCR Management Plan to better account for this information in the document and ensure proper implementation. However, the project plans and design as proposed and the analysis of a known archaeological and tribal cultural resource, supported by substantial evidence, are sufficiently detailed to identify anticipated project impacts and to allow for the specific performance criteria to be identified for the AR-TCR Management Plan, the implementation of which would occur at a later date.

Grading plans and construction drawings have not been prepared and the specific phases of the project implementation have not been determined. Preparing the Archaeological Resource-Tribal Cultural Resource (AR-TCR) Management Plan using more advanced project designs and based on an anticipated schedule for the types of construction activities would allow the AR-TCR Management Plan to better account for this information in the document and ensure proper implementation. However, the project plans and design as proposed and the analysis of a known archaeological and tribal cultural resource, supported by substantial evidence, are sufficiently detailed to allow for the specific performance criteria to be identified for the AR-TCR Management Plan, the implementation of which would occur at a later time.

According to State CEQA Guidelines 15126.4(b)(3), preservation in place (i.e., avoidance) is the preferred manner of treatment of a significant archaeological site. If a previously unrecorded archaeological component of LAN-159/H is identified during ground-disturbing activities for the project and is found to contribute to the significance of the site, it is possible that under some circumstances

preservation in place would not be a feasible form of mitigation under any of the examples listed in State CEQA Guidelines, and alternative treatment options would be required to avoid or reduce potentially significant impacts. If avoidance is not feasible, treatment may include archaeological data recovery (i.e., excavation, laboratory processing, and analysis) to obtain important information and thereby reduce potential impacts to less than significant.

b) Would the project disturb any human remains, including those interred outside of formal cemeteries?

CONSTRUCTION

The project site contains LAN-159/H, which includes but is not limited to the partial skeletal remains of a female Native American dated to approximately 10,000 B.P. As previously described, the project is anticipated to require ground disturbance over the 13-acre site, including approximately 53,000 cubic yards of cut/export and 37,000 cubic yards of imported fill with excavations 6 to 10 feet below ground. Because human remains were found in one location, there is a possibility that additional remains may exist elsewhere on the project site. Proposed ground-disturbing activities would have the potential to disturb additional human remains associated with LAN-159/H, if present. Therefore, impacts could be *significant*.

OPERATION

Operation of the project would not result in ground-disturbing activities such as grading or excavation outside of the existing research sites; therefore, there is no potential to disturb any human remains, including those interred outside of formal cemeteries. No impact would occur during project operation.

CR-ARCH Impact 2
Construction of the project could disturb previously unidentified human remains if present within the project site. Construction impacts could be significant. Operation of the project would not disturb any human remains, including those interred outside of formal cemeteries. No operational impacts would occur. (CEQA Checklist Appendix G Threshold v. c)
Mitigation Measures
Implementation of Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4 is required.
Impacts Following Mitigation
Based on required compliance with California Health and Safety Code Section 7050.5 and the PRC and implementation of Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4 during project construction, impacts would be reduced to less than significant with mitigation. No operational impacts would occur.

5.4.6 Cumulative Impact Analysis

For the purposes of this EIR analysis, the geographic context for cumulative impacts to archaeological resources is defined as the northwestern Los Angeles Basin—approximately the area west of the Los Angeles River, south of the Santa Monica Mountains, east of the Pacific coastline, and north of the Palos Verde Peninsula. The archaeological record reflects a complex relationship between human behavior, diverse environmental conditions, and the complexities of preservation, all of which have changed over

the course of human history in California. While the present-day street grid and contemporary administrative and cadastral boundaries, such as the limits of incorporated cities and counties, are appropriate spatial units for analyzing the archaeological record after Spanish colonization, they are inadequate when it comes to the Native American archaeological record. By comparison, physiographic regions, like the Los Angeles Basin, characterize areas with similar environmental features: topography, hydrological patterns, distribution of vegetation communities, areas of sediment deposition, and erosion. Because these environmental features have exerted a strong influence on human land-use patterns—where human activities were more or less likely to occur—and by extension, where the physical products of those activities are more or less likely to be preserved as part of the archaeological record, they provide a more useful and meaningful way to assess the whole of the archaeological record.

For the analysis of cumulative impacts, the northwestern Los Angeles Basin provides an area large enough to contain a representative sample of Native American archaeological sites, the traditional Gabrielino territory, and relevant historical and contemporary administrative boundaries, while being small enough to account for the cumulative impacts from projects on a more local scale. Notably, the northwestern Los Angeles Basin contains a complex of sites recorded along Ballona Creek and around the Ballona wetlands, Kuruvungna Village Springs, and an important archaeological site recorded at Union Station. The northwestern Los Angeles Basin covers less than 20 percent of the entire Gabrielino traditional territory, and to a lesser extent the overlapping portions of the Tataviam traditional territory, but the northwestern Los Angeles Basin contains several important settlements and placenames, including Guaspet, Yaanga, and, as mentioned, Kuruvungna. Also, the entire historical boundary of Rancho La Brea and a substantial portion of the incorporated boundary of the City of Los Angeles are contained within the northwestern Los Angeles Basin, both of which are influential in terms of defining the geographic areas specific to historical archaeological resources. For these reasons, the northwestern Los Angeles Basin, a physiographic subregion, provides a reasonable basis on which to consider potential cumulative impacts.

Archaeological resources are nonrenewable, irreplaceable, and inherently important to the public, including Native American descendants, and their destruction prevents further study of past lifeways and history. Projects that could be developed in the northwestern Los Angeles Basin include the development projects listed in Chapter 4, Environmental Setting, as well as additional development projects beyond the geographical limit of the cumulative project listing in Chapter 4. The continued development of projects in the northwestern Los Angeles Basin, particularly those for land development and transportation, would have the potential to result in a cumulative impact associated with the loss of archaeological resources. Given the potential for archaeological resources within the northwestern Los Angeles Basin and the number of construction activities that involve disturbance of archaeologically sensitive areas, cumulative impacts to archaeological resources, including the disturbance of human remains, could occur through physical demolition, destruction, relocation, or alteration of a resource such that the significance of the historical resource would be materially impaired.

Prior to the implementation of the mitigation measures outlined previously in this section, because the project has the potential to contribute to the loss of archaeological resources that could combine with impacts from past, present, and reasonably foreseeable projects, the project's contribution toward cumulative effects on archaeological resources could be *significant* if these mitigation measures were not required to address the potential for direct impacts and the potential for project contributions to cumulative impacts.

As provided in the impacts analysis in Section 5.4.5, a series of mitigation measures have been developed to address the project's potential for impacts to archaeological resources. These mitigation measures have been developed to not only address direct impacts of project implementation, but also to address the project's contribution to cumulative archaeological resource impacts. Implementation of Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4 provide for retention of a qualified

archaeologist, cultural resources sensitivity training, development of a cultural resources monitoring and mitigation plan, archaeological monitoring, and treatment of unanticipated discoveries, which would ensure that significant archaeological impacts, both direct and contributions to cumulative impacts, would be reduced to less than significant with mitigation. Taken together, implementation of these mitigation measures would ensure that the project would have less than significant impacts related to archaeological resources, including the disturbance of human remains, and would address the project's potential for significant contributions to potential cumulative archaeological impacts in the northwestern Los Angeles Basin.

CR-ARCH Impact 3 (Cumulative Impacts)
Prior to the consideration of proposed mitigation measures, construction of the project could result in significant contributions to cumulative impacts related to the disturbance and destruction of archaeological resources pursuant to State CEQA Guidelines Section 15064.5, and human remains. Cumulative impacts could be significant.
Mitigation Measures
Implement Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4. These measures put forward a process that ensures any new archaeological resources or new components of existing historical resources would be identified, inventoried, and evaluated as contributors to the historical significance of the resource, and treated appropriately if found to be a contributing element, which incorporates input from culturally and geographically affiliated California Native American tribes.
Impacts Following Mitigation
With implementation of Mitigation Measures CR-ARCH/mm-1.1 through CR-ARCH/mm-1.4, the project's contribution to cumulative impacts related to disturbance and destruction of archaeological resources would be reduced to less than significant.

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