

3.17 Cultural Resources

3.17.1 Introduction

Section 3.17, Cultural Resources, of the *Burbank to Los Angeles Project Section Draft Environmental Impact Report/Environmental Impact Statement* (EIR/EIS) analyzes the potential impacts of the No Project Alternative and the High-Speed Rail (HSR) Build Alternative and describes impact avoidance and minimization features (IAMF) that would avoid, minimize, or reduce these impacts. Where applicable, mitigation measures are proposed to further reduce, compensate for, or offset impacts of the HSR Build Alternative. This section also defines the cultural resources within the region and describes the affected environment in the resource study areas (RSA).

Studies conducted in the preparation of this document followed those prescribed by Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, which requires that effects on historic properties be taken into consideration in any federal undertaking. (“Undertaking” is the Section 106 term for “project.” For consistency, “project” will be used throughout this chapter.) These studies include the results of background literature and records research, pedestrian field surveys, and consultations with the Native American community, the State Historic Preservation Officer (SHPO), other interested parties, and local, state, and federal agencies.

The Section 106 regulations allow for use of a programmatic agreement (PA) to “govern the implementation of a particular program or the resolution of adverse effects from certain complex project situations or multiple undertakings” (36 Code of Federal Regulations [C.F.R.] 800.14). Pursuant to that authority, the Federal Railroad Administration (FRA) and the California High-Speed Rail Authority (Authority) consulted with the SHPO and the Advisory Council on Historic Preservation to develop a PA for the statewide HSR program. Executed in 2011, the PA modifies the standard Section 106 consultation procedures to reflect the challenges inherent in carrying out Section 106 consultation for such a large-scale project. The PA includes the exemption of certain properties deemed to have little or no potential to be eligible for the National Register of Historic Places (NRHP); streamlined documentation of significantly altered resources that have reached 50 years of age; a requirement to prepare a memorandum of agreement (MOA) for each project section that adversely affects or has the potential to affect historic properties; and a requirement to prepare treatment plans—one for built historic properties and one for archaeological properties—that tier off the MOA. The Section 106 Programmatic Agreement can be referenced in Appendix 3.17-A; however, the Authority is actively consulting with signatories to the Section 106 Programmatic Agreement to revise the PA to include the Authority’s responsibilities under NEPA Assignment.

Additional technical details on cultural resources are provided in the Archaeological Survey Report (ASR), the ASR Addendum 1, the Historic Architectural Survey Report (HASR), and the Finding of Effects (FOE) for the Burbank to Los Angeles Project Section (Authority and FRA 2017, 2019a, 2019b, and Authority 2019).

Six other resource sections in this EIR/EIS provide additional information related to cultural resources:

- **Section 3.4, Noise and Vibration**—Impacts of implementing the HSR Build Alternative on cultural resources resulting from damage caused by vibration and disturbance caused by noise.

Historic and Archaeological Resources

Recognition of the importance of historic and archaeological resources is a priority for the federal government, as indicated by the numerous statutes and regulations that address these resources. Federal regulations require that the project identify and consider the environmental impacts of this federal action, including impacts on cultural resources. Additionally, this analysis considers the proposed project’s effects, as defined by Section 106 of the National Historic Preservation Act, on cultural resources that are listed, or eligible for listing, in the National Register of Historic Places.

- **Section 3.12, Socioeconomics and Communities**—Impacts of implementing the Burbank to Los Angeles Project Section HSR Build Alternative resulting from station locations close to historical buildings and facilities.
- **Section 3.16, Aesthetics and Visual Resources**—Impacts of implementing the HSR Build Alternative on the visual context and setting of historic properties that contribute to their historic significance.
- **Section 3.19, Cumulative Impacts**—Impacts resulting from construction and operation of the HSR Build Alternative related to past, present, and reasonably foreseeable future projects.
- **Chapter 4, Section 4(f) and Section 6(f) Evaluations**—Impacts of implementing the HSR Build Alternative on historic properties that may be subject to Section 4(f) use and, consequently, least harm analysis.
- **Chapter 5, Environmental Justice**—Impacts related to historic properties that would disproportionately affect minority or low-income populations

3.17.1.1 Definition of Resources

This section provides definitions related to historic and archaeological resources as analyzed in this Draft EIR/EIS.

“Cultural Resources” include prehistoric- and historic-era archaeological resources, architectural/built-environment resources, and traditional cultural properties that are listed in or found eligible for the NRHP or California Register of Historical Resources (CRHR). These resources include the following:

- **Prehistoric Archaeological Resources** are places where Native Americans lived or carried out activities during the prehistoric period (as late as A.D. 1769), and which may contain artifacts, cultural features, subsistence remains, and human burials.
- **Historic-Era Archaeological Resources** are post-European contact sites that may include remains of early settlements—features such as wells, privies, and foundations—that have the potential to address relevant research questions for the region.
- **Historic Architectural/Built-Environment Resources** include buildings, structures, objects, landscapes, districts, and linear features.
- **Traditional Cultural Properties** are places important to Native Americans or other living communities or ethnic groups.

This section also uses the terms “historic property” and “historical resource.” These terms have specific meanings under the NHPA and the California Environmental Quality Act (CEQA), respectively:

- **Historic property**, as defined in regulations issued under Section 106 of the NHPA, means “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.” (36 C.F.R. 800.16)
- **Historical resources**, as defined in the CEQA Guidelines, include but are not limited to resources listed in or determined eligible for listing in the CRHR (CEQA Guidelines, California Code of Regulations, Title 14, Section 15064.5).

3.17.2 Laws, Regulations, and Orders

This section describes the federal, state, and local laws, regulations, orders, and plans that are relevant to cultural resources. The primary applicable federal and state laws and regulations protecting cultural resources are Section 106 of the NHPA, as amended, National Environmental Policy Act of 1969 (NEPA), Section 4(f) of the Department of Transportation Act of 1966, the CEQA, and California Public Resources Code (Cal. Public Res. Code) Sections 5024.1 and

21084.1. These and other federal and state laws and regulations that pertain to cultural resources are described below, as are regional and local planning guidance and ordinances.

California and federal laws exempt from disclosure information regarding the location of Native American archaeological and other culturally sensitive sites. Therefore, this chapter does not include the locations of such sites. Specifically, the California Public Records Act exempts from public disclosure the records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in sections 5097.9 and 5097.933 of the Cal. Public Res. Code (Gov. Code, Section §6254, subd. [r]). The act also exempts from public disclosure records that relate to archaeological site information and reports maintained by or in the possession of the California Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission (NAHC), another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency (Gov. Code, §6254.10). In addition, CEQA Guidelines prohibit inclusion of information about the location of archaeological sites and Sacred Lands in an EIR (CEQA Guidelines, §15120, subd. [d]). Federal law also exempts information pertaining to sensitive cultural resource information (54 United States Code [U.S.C.] 300310(a) and 54 U.S.C. 300310(b)).

3.17.2.1 Federal

National Environmental Policy Act (NEPA) (42 U.S.C. Section 4321 et seq.)

NEPA, as amended, establishes the federal policy of protecting important historic, cultural, and natural aspects of our national heritage during federal project planning. All federal or federally assisted projects requiring action pursuant to Section 102 of NEPA must take into account the effects on cultural resources. According to the NEPA regulations (40 C.F.R. Part 1500 et seq.), in considering whether an action may "significantly affect the quality of the human environment," an agency must consider, among other things, unique characteristics of the geographic area such as proximity to historic or cultural resources and the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP.

The NEPA regulations also require that, to the fullest extent possible, agencies shall prepare draft EISs concurrently with and integrated with environmental impact analyses and related surveys and studies required by the NHPA. When Section 106 of the NHPA and NEPA are integrated, project impacts that cause adverse effects under Section 106 are described in the EIS.

Federal Railroad Administration, Procedures for Considering Environmental Impacts (64 Federal Register 28545)

On May 26, 1999, the FRA released the *Procedures for Considering Environmental Impacts* (FRA 1999). These FRA procedures supplement the Council on Environmental Quality Regulations and describe FRA's process for assessing the environmental impacts of actions and legislation proposed by the agency and for the preparation of associated documents. The FRA *Procedures for Considering Environmental Impacts* state that "the EIS should identify any significant changes likely to occur in the natural environment and in the developed environment. The EIS should also discuss the consideration given to design quality, art, and architecture in project planning and development as required by U.S. Department of Transportation Order 5610.4." These FRA procedures state that an EIS should consider possible impacts on cultural resources.

National Historic Preservation Act (54 U.S.C. Section 300101, et seq.) including Section 106 of the NHPA, 54 U.S.C Section 306108

The NHPA establishes the federal government policy on historic preservation and the programs, including the NRHP, through which this policy is implemented. Under the NHPA, significant cultural resources, referred to as historic properties, include any prehistoric or historic district, site, building, structure, object, or landscape included in, or determined eligible for inclusion in, the NRHP. Historic properties also include resources determined to be National Historic Landmarks, which are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting U.S.

heritage. A property is considered historically significant if it meets one of the NRHP criteria and retains sufficient historic integrity to convey its significance. This act also established the Advisory Council on Historic Preservation, an independent agency that administers Section 106 of the NHPA by developing procedures to protect cultural resources included in, or eligible for inclusion in, the NRHP. Regulations are published in 36 C.F.R. 60, 63, and 800.

36 C.F.R. Part 800 Implementing Regulations for Section 106 of the National Historic Preservation Act

Section 106 requires that effects on historic properties be taken into consideration in any federal project. The process has four steps: (1) initiating the Section 106 process, which includes identifying and initiating consultation with Native American tribes, local governments, and other interested parties, (2) identifying historic properties, (3) assessing adverse effects, (4) delineating stipulations by which to resolve adverse effects in an agreement document, and (5) implementing stipulations in an agreement document.

Section 106 affords the Advisory Council on Historic Preservation and the SHPO, as well as other consulting parties, a reasonable opportunity to comment on any project that would adversely affect historic properties. SHPOs administer the national historic preservation program at the state level, review NRHP nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with federal agencies during Section 106 review.

The NRHP eligibility criteria (36 C.F.R. 60.4) was used to evaluate historic significance of resources within the project's area of potential effects (APE). The criteria for evaluation are as follows:

- a) [Properties] that are associated with events that have made a significant contribution to the broad patterns of our history; or
- b) [Properties] that are associated with the lives of persons significant to our past; or
- c) [Properties] that 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
- d) [Properties] that have yielded, or may be likely to yield, information important in prehistory or history.

Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for NRHP inclusion. In addition, a broader range of Traditional Cultural Properties (TCP) are also considered and may be determined eligible for or listed in the NRHP. TCPs are places may be eligible because of their association with the cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. In the NRHP programs, "culture" is understood to mean the traditions, beliefs, practices, customary ways of life, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole.

Section 4(f) of the Department of Transportation Act (49 U.S.C. Section 303)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, prohibits use of a publicly owned park, recreation area, wildlife or waterfowl refuge, or publicly or privately owned historic site of national, state, or local significance listed on or found eligible for listing on the NRHP for a transportation project unless the Secretary of Transportation has made a finding of *de minimis* impact, or has determined that there is no feasible and prudent alternative to such use and the project includes all possible planning to minimize harm to the property resulting in such use. Collectively, the properties protected by Section 4(f) are known as "Section 4(f) resources."

"Use" in Section 4(f) occurs when a transportation project requires a direct physical taking of Section 4(f) resources, regardless of the magnitude of that direct impact. A "use" also occurs when the project has indirect impacts that substantially impair or diminish the activities, features,

or attributes that contribute to the significance of a Section 4(f) resources; this type of use is known as a “constructive use.” As noted above, the federal transportation agency can determine that the project impacts on a 4(f)-protected property is *de minimis*, or subject to a minor use, without having to make a finding that there are no prudent and feasible avoidance alternatives. For historic properties, a determination of a “*de minimis*” impact can be made when there is a “use” of the historic property, and there is a Section 106 finding of no adverse effect.

Archaeological and Historic Preservation Act (54 U.S.C. Sections 312501 to 312508)

This act provides for preserving significant historic or archaeological data that may otherwise be irreparably lost or destroyed by construction of a project by a federal agency or under a federally licensed activity or program. This includes relics and specimens.

American Antiquities Act (54 U.S.C. Sections 320301 to 320303)

The American Antiquities Act prohibits appropriation, excavation, injury, or destruction of “any historic or prehistoric ruin or monument, or any object of antiquity” on lands owned or controlled by the federal government. The act also established penalties for such actions and sets forth a permit requirement for collection of antiquities on federally owned lands.

American Indian Religious Freedom Act (42 U.S.C. Section 1996)

The American Indian Religious Freedom Act protects and preserves the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts, and Native Hawaiians. The act requires policies of all governmental agencies to respect the free exercise of native religion and to accommodate access to and use of religious sites to the extent that the use is practicable and is not inconsistent with an agency’s essential functions. If a place of religious importance to American Indians may be affected by a project, the American Indian Religious Freedom Act promotes consultation with Indian religious practitioners, which may be coordinated with Section 106 consultation.

Archaeological Resources Protection Act (64 U.S.C. Section 300101)

This statute was enacted to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on federally owned lands and Indian lands. It was also enacted to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals (Section 2(4)(b)).

Native American Graves Protection and Repatriation Act (25 U.S.C. Sections 3001–3013)

The Native American Graves Protection and Repatriation Act describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statutes as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. One purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on federal lands.

Presidential Memorandum, Government-to-Government Relations with Native American Tribal Governments, April 29, 1994

Directed to the heads of executive departments and agencies, this memorandum outlines the principles that are to be followed in interactions with the governments of federally recognized Native American tribes. It includes provisions for government-to-government relations and consultation, and requires assessment of the impact of federal government plans, projects, programs, and activities on tribal trust resources and assurance that tribal government rights and concerns are considered during the development of such plans, projects, programs, and activities.

Executive Order 13175, Consultation with Indian Tribal Governments

This order establishes regular and meaningful consultation and collaboration with officials of federally recognized Indian tribes in the development of federal policies that have tribal implications, to strengthen the government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes. It sets forth guiding principles for government-to-government relations with Indian tribes, along with criteria for formulating and implementing policies that have tribal implications.

U.S. Department of Transportation Tribal Consultation Plan (Order 5301.1)

In response to Executive Order 13175, this plan states that as an executive agency, the U.S. Department of Transportation has a responsibility to, and is committed to working with, the governments of federally recognized Indian tribes in a unique relationship, respecting tribal sovereignty and self-determination. The plan identifies specific goals, including establishing direct contact with Indian tribal governments at reservations and tribal communities and seeking tribal government representation in meetings, conferences, summits, advisory committees, and review boards concerning issues with tribal implications.

3.17.2.2 State

CEQA

CEQA requires the lead agency to consider the effects of a project on historical resources. CEQA Guidelines Section 15064.5 provides specific guidance for determining the significance of impacts on historical resources (CEQA Guidelines §15064.5(b)), and unique archaeological resources (CEQA Guidelines §15064.5(b) and Cal. Public Res. Code §21083.2). Under CEQA, these resources are called “historical resources” whether they are of historic or prehistoric age. CEQA Cal. Public Res. Code §21084.1 defines historical resources as those listed, or eligible for listing, in the CRHR or those listed in the historical register of a local jurisdiction (county or city) unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. NRHP-listed as eligible “historic properties” in California are considered historical resources for the purposes of CEQA and are also listed in the CRHR. The CRHR criteria for listing such resources are based on, and are very similar to, the NRHP criteria. CEQA Cal. Public Res. Code Section 21083.2 and CEQA Guidelines Section 15064.5(c) provide further definitions and guidance for archaeological sites and their treatment.

Different legal rules apply to the two different categories of cultural resources, though the two categories sometimes overlap where a “unique archaeological resource” also qualifies as an “historical resource.” In such an instance, the more stringent rules for the protection of archaeological resources that are historical resources apply.

Section 15064.5 also prescribes a process and procedures for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains during implementation of a project. This includes consultations with appropriate Native American tribes.

Guidelines for the implementation of CEQA define procedures, types of activities, persons, and public agencies required to comply with CEQA. Section 15064.5(b) prescribes that project effects that would “cause a substantial adverse change in the significance of an historical resource” are significant effects on the environment. Substantial adverse changes include physical changes to both the historical resource and its immediate surroundings.

Section 15126.4(a)(1) states that an EIR shall describe feasible measures which could minimize significant adverse impacts. Section 15126.5(b) describes mitigation measures related to impacts on historical resources.

California Register of Historical Resources (Cal. Public Res. Code Section 5024.1 and 14 California Code of Regulations Section 4850)

Cal. Public Res. Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR also includes all properties listed or determined eligible for listing in the NRHP, including properties evaluated and determined eligible under Section 106. The criteria for listing on the CRHR, Criteria 1 – 4, are similar to those of the NRHP:

- 1) [resources that are] associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or
- 2) [resources that are] associated with the lives of persons important in our past; or
- 3) [resources that] embody 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 value; or
- 4) [resources that have] yielded, or may be likely to yield, information important in prehistory or history.

The CRHR regulations govern the nomination of resources to the CRHR (14 California Code of Regulations Section 4850). The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

California Native American Graves Protection and Repatriation Act (California Health & Safety Code Section 8010 et seq.)

The California Native American Graves Protection and Repatriation Act establishes a state repatriation policy that is consistent with and facilitates implementation of the federal Native American Graves Protection and Repatriation Act. The act strives to ensure that all California Native American human remains and cultural items are treated with dignity and respect, and asserts the state's intent to provide mechanisms for aiding California Native American tribes, including nonfederally recognized tribes, in repatriating remains.

State-Owned Historical Resources (Cal. Public Res. Code Sections 5024 and 5024.5)

Under Cal. Public Res. Code Section 5024(f), a state agency must provide notification and submit to the SHPO documentation for any project having the potential to affect state-owned historical resources listed in or potentially eligible for inclusion in the NRHP, or registered as or eligible for registration as a California Historical Landmark (CHL). Cal. Public Res. Code Section 5024(f) also applies to archaeological sites, landscapes, and other nonstructural resources that are listed in or have been determined eligible for inclusion in the NRHP or that are registered or determined eligible for registration as a CHL. Cal. Public Res. Code Section 5024(f) further requires that state agencies request SHPO's comments and provide documentation of effects (i.e., No Historic Properties Affected, No Adverse Effect, or Adverse Effect) to NRHP listed/eligible or CHL registered/eligible archaeological sites, built resources, landscapes, and other nonstructural historical resources.

Like Section 106, but unlike CEQA, Cal. Public Res. Code Section 5024.5 uses the term "adverse effect" instead of "substantial adverse change" to describe effects on state-owned historical resources. Like Section 4(f) of the U.S. Department of Transportation Act, Cal. Public Res. Code Section 5024.5 uses the terms "prudent and feasible" and requires state agencies to adopt prudent and feasible measures that would eliminate or mitigate the adverse effects on state-owned historical resources. Under Cal. Public Res. Code Section 5024.5, state agencies must seek the SHPO's concurrence early in the planning process by providing the SHPO with a notice and summary documentation of projects involving state-owned historical resources. As outlined in Cal. Public Res. Code Section 5024.5, the SHPO makes the determination as to whether an effect is adverse, not the state agency.

3.17.2.3 Regional and Local Plans, Policies, and Ordinances

This section identifies local planning guidance and ordinances, including general and specific plans, and historical or cultural resources protection ordinances. It is organized by county, immediately followed by cities within that county, to provide an overall framework for the geographic area. Table 3.17-1 lists county and city general plan goals, policies, and ordinances relevant to the HSR Build Alternative.

Table 3.17-1 Regional and Local Plans and Policies

Policy Title	Summary
Los Angeles County	
<i>Los Angeles County General Plan</i> (2015), Conservation and Natural Resources Element, Policies 14.1, 14.2, 14.3, 14.5, 14.6	The general plan guides land use in Los Angeles County and sets forth policies and programs the county uses to manage future growth. The conservation and natural resources element contains policies designed to protect historic and cultural resources within the county.
City of Burbank	
<i>City of Burbank General Plan</i> (2013), Land Use Element, Policies 3.10, 3.11, and 6.1; Plan Realization Element, Program LU-4: Historic Preservation Plan	The general plan guides land use in the city of Burbank. The land use element of the general plan features three policies that encourage the preservation of historical architectural and archaeological resources, and the plan realization element establishes a preservation plan.
<i>City of Burbank Historic Preservation Plan</i> (1999)	The <i>City of Burbank Historic Preservation Plan</i> , adopted in November 1999, provides further direction for implementing the ordinance, with specific guidelines and policies for historic preservation.
Burbank Municipal Code, Article 2, Zoning Ordinance; Article 9, Division 6, Historic Preservation Regulations	The Burbank Municipal Code provides zoning regulations to control land use and density to promote the public health, safety, peace, comfort, convenience, prosperity, and welfare of the city. Article 2 defines historic districts, and Article 9, Division 6, outlines criteria for historic resource designation and preservation.
Historic Resource Management Ordinance	This ordinance contains the procedures for designating and maintaining historic properties and establishes the duties and responsibilities of the Heritage Commission.
City of Glendale	
<i>City of Glendale General Plan</i> (1997), <i>Historic Preservation Element</i> , Policies 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-10, 1-11, 1-12, 2-2, 2-27, and 2-33; Open Space and Conservation Element, Goal 2	The general plan guides land use in the city of Glendale. The historic preservation element of the general plan provides policies to discourage the removal and relocation of historic resources and encourage recognition of Native American archaeological sites. Cultural and historic resource preservation is also listed as a goal in the open space and conservation element.
<i>City of Glendale Downtown Specific Plan</i> (2007), Policies 7.2.2.A and 7.2.2.B	The <i>Glendale Downtown Specific Plan</i> guides design in the specific plan area and features specifications for the restoration and designation of historic resources.
Glendale Municipal Code, Title 30 Zoning, Chapter 30.25; Historic Preservation Ordinance, Chapter 15.20	The Glendale Municipal Code provides zoning and subdivision regulations in order to promote and protect the public health, safety, and general welfare and economic viability of the city. Chapter 30.25 of Title 30 establishes a historic district overlay zone and criteria for zone designation. The historic preservation ordinance governs only those properties officially on the Glendale Register. It also contains the eligibility criteria, incentives, designation process, design review process, de-listing process, and duty to maintain.

Policy Title	Summary
City of Los Angeles	
<i>City of Los Angeles General Plan</i> (2001), Conservation Element, Objective II-9, Policy II-9, Program 1	The <i>City of Los Angeles General Plan</i> provides guidelines for development within the city. The conservation element identifies natural and cultural resources within the city of Los Angeles and describes objectives, policies, and programs for their protection, preservation, and management.
<i>Sun Valley-La Tuna Canyon Community Plan</i> (1999), Land Use Element, Objective 1-4, Policy 1-4.1	The <i>Sun Valley-La Tuna Canyon Community Plan</i> is one of the 35 community plans that make up the Land Use Element of the <i>City of Los Angeles General Plan</i> . One of the plan's objectives is historic preservation, which is supported by policies and programs of protection.
<i>Northeast Los Angeles Community Plan</i> (1999), Land Use Policies and Programs, Objective 1-4, Policies 1-4.1, 1-4.2, and 1-4.3; Preservation of Historic and Cultural Amenities Objective 14-1, Policies 14-1.1 and 14-1.2, Objectives 14-2 and 14-3	The <i>Northeast Los Angeles Community Plan</i> is one of the 35 community plans that make up the Land Use Element of the <i>City of Los Angeles General Plan</i> . Two of the plan's objectives include historic preservation and are supported by policies of protection and reuse.
<i>Central City North Community Plan</i> (2000), Goal 17, Objective 17-1, Policy 17-1.1, and Objective 18-1	The <i>Central City North Community Plan</i> is one of the 35 community plans that make up the Land Use Element of the <i>City of Los Angeles General Plan</i> . It contains the goal of preserving historic and cultural resources and is supported by policies that encourage preservation, enhancement, and reuse.
<i>Cornfield Arroyo Seco Specific Plan</i> (2012), Zoning and Standards, Standard 2.1	The <i>Cornfield Arroyo Seco Specific Plan</i> encompasses a plan area within a portion of the Central City North, Northeast, and Silverlake-Echo Park community plan areas. It contains standards for addressing the use of historical structures listed on national, state, or local listings of historical places within the plan area.
<i>Alameda District Specific Plan</i> (1996), Urban Design Regulations, Guidelines C.1 and C.2	The <i>Alameda District Specific Plan</i> guides land use in the Alameda District Specific Plan Area. It includes two guidelines regarding historic preservation and rehabilitation.
<i>Cultural Heritage Master Plan</i> (2000)	The City of Los Angeles Department of Cultural Affairs developed a <i>Cultural Heritage Master Plan</i> . The master plan contains important policy recommendations on historic preservation in Los Angeles, many of which shaped the creation and early work of the Office of Historic Resources.
City of Los Angeles Municipal Code Number 178402: Cultural Heritage Ordinance	In the city of Los Angeles, the procedures for Historic-Cultural Monument designations and their preservation are described in the Cultural Heritage Ordinance (effective April 2, 2007). The ordinance also establishes the Cultural Heritage Commission and defines its roles and responsibilities.

3.17.3 Consistency with Local Plans and Laws

As indicated in Section 3.1, Introduction, CEQA and NEPA regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws.

Several federal and state laws, listed in Section 3.17.2, Laws, Regulations, and Orders, pertain to cultural resources. The Authority, as the federal and state lead agency proposing to construct and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction of the project. Pursuant to U.S.C. Title 23 Section 327, under the NEPA Assignment Memorandum of Understanding between the FRA and the State of California, effective July 23, 2019, the Authority is the federal lead agency for environmental reviews and approvals for all Authority Phase 1 and Phase 2 California HSR System projects, including the Burbank to Los Angeles Project Section.

Therefore, there would be no inconsistencies between the HSR Build Alternative and these federal and state laws and regulations.

Section 3.1.3.3, Consistency with Plans and Laws, describes state and regional policies supporting the California HSR System. Because the HSR project is a project of the Authority in its capacity as state and federal lead agency, consistency with local plans is not required. The Council on Environmental Quality and FRA regulations, however, require the discussion of any inconsistency or conflict of a proposed action with regional or local plans and laws. Where inconsistencies or conflicts exist, the Council on Environmental Quality and FRA require a description of the extent of reconciliation and the reason for proceeding if full reconciliation is not feasible (40 C.F.R. 1506.2(d) and 64 Federal Register 28545, 14(n)(15)). The CEQA Guidelines also require that an EIR discuss the inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans (CEQA Guidelines § 15125(d)).

The Authority is a state agency and therefore is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the HSR project so it is consistent with land use and zoning regulations. A total of 16 plans and policies were reviewed. The HSR Project Alternative would be consistent with nine policies and would be inconsistent with seven policies. Table 3.17-2 summarizes the project's incompatibility with the local jurisdictions and planning documents relevant to the HSR Build Alternative.

After implementation of mitigation measures, all inconsistencies would be reconciled and the HSR Build Alternative would be compatible with all regional and local plans and laws. Through implementation of CUL-MM#1, Mitigate Adverse Effects to Archaeological and Built Environment Resources Identified During Phased Identification, the Authority would complete the inventory for archaeological resources and develop treatment plans for any identified resources that would be impaired by the alternatives. Implementation of CUL-MM#2, Halt Work in the Event of an Archaeological Discovery and Comply with the PA, MOA, the Archaeological Treatment Plan (ATP), and all State and Federal Laws, as Applicable, would require that construction crews be trained to identify buried cultural resources during construction activities, provide for construction monitoring by qualified professionals in areas of archaeological sensitivity, and establish procedures to stop work in the event of a discovery. In accordance with CUL-MM#2, if human remains are encountered, the appropriate state and federal laws would be followed to determine whether the remains are affiliated with a Native American tribe; if so, such remains would be treated appropriately.

Refer to Appendix 3.1-B for a complete consistency analysis of local plans and policies.

3.17.4 Coordination of Section 106 Process with NEPA and CEQA Compliance

The Advisory Council on Historic Preservation advises federal agencies to coordinate compliance with Section 106 of the NHPA and the procedures in the regulations implementing Section 106, with steps taken to meet the requirements of NEPA so they can meet the purposes and requirements of both statutes in a timely and efficient manner. When NEPA review and Section 106 are integrated, ways to avoid, minimize, or mitigate adverse effects while identifying alternatives and preparing NEPA documentation can be assessed. Similarly, both CEQA Guidelines and NEPA regulations encourage the preparation of joint documents as a way to avoid duplication and delay and to coordinate measures to avoid, minimize, or mitigate impacts on historic resources. Title 36 CFR Part 800 defines the Section 106 process and documentation requirements. Such measures are binding commitments documented in the EIR/EIS, as well as in compliance with Section 106 by the preparation of an MOA. There are some specific CEQA and NEPA requirements that diverge from the Section 106 process; these exceptions are addressed in Section 3.17.5.4, Methods for NEPA and CEQA Impact Analysis.

Table 3.17-2 Inconsistency with Regional and Local Plans and Policies

Policy Title	Reason for Inconsistency
<p><i>Los Angeles County General Plan (2015)</i> Goal C/NR 14: Protected historic, cultural, and paleontological resources.</p>	<p>Inconsistent. The EIR/EIS considers historic, cultural, and paleontological resources and sites in its analysis and would alter such resources only as necessary from the demands of the project. However, the HSR Build Alternative may result in impacts on historic and cultural resources, and therefore would not conform to the policy of protecting these resources.</p>
<p><i>City of Glendale General Plan, Historic Preservation Element (1997)</i> Policy Objective 1-11: Ensure protection of historic resources through enforcement of existing codes.</p>	<p>Inconsistent. The EIR/EIS considers historic resources in its analysis. However, the HSR Build Alternative may result in impacts on historic resources and would therefore not conform to the policy of ensuring the protection of such resources.</p>
<p><i>City of Glendale General Plan, Open Space and Conservation Element (1993)</i> Goal 2: Protect vital or sensitive open space areas including the ridgelines, canyons, streams, geologic formations, watersheds, and historic, cultural, aesthetic, and ecologically significant areas from the negative impacts of development and urbanization.</p>	<p>Inconsistent. The EIR/EIS considers cultural resources in its analysis. However, the HSR Build Alternative may result in impacts on cultural resources and would therefore not conform to the policy of ensuring the protection of such resources.</p>
<p><i>City of Los Angeles General Plan, Conservation Element (2001)</i> Objective II-9: Protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.</p>	<p>Inconsistent. The EIR/EIS considers impacts on cultural and historical sites, and it would assist in identifying and documenting resources for research and community educational purposes. However, the HSR Build Alternative may result in impacts on cultural and historical sites, which would not conform to the objective to protect these resources.</p>
<p><i>Northeast Los Angeles Community Plan, Preservation of Historic and Cultural Amenities (1999)</i> Objective 14-1: To ensure that the plan area's significant cultural and historical resources are protected preserved and/or enhanced.</p>	<p>Inconsistent. Cultural and historical resources would be identified during the course of the EIR/EIS process. However, some resources may be affected.</p>
<p><i>Central City North Community Plan (2000)</i> Goal 17: Preservation and restoration of cultural resources, neighborhoods, and landmarks which have historical and/or cultural significance.</p>	<p>Inconsistent. Cultural resources, neighborhoods, and landmarks would be identified during the course of the EIR/EIS process. However, the HSR Build Alternative may result in impacts on some resources, including the historic Main Street Bridge.</p>
<p><i>City of Los Angeles Cultural Heritage Master Plan (2000)</i> Policy 1: The City of Los Angeles shall protect and utilize its cultural, architectural, and historic resources.</p>	<p>Inconsistent. The EIR/EIS considers historic resources, buildings, and sites in its analysis and would alter such resources only as necessary from the demands of the project. However, the HSR Build Alternative may result in impacts on historic resources, buildings, or sites and would therefore not conform to the policy of preserving such resources.</p>

EIR/EIS = Environmental Impact Report/Environmental Impact Statement
HSR = high-speed rail

3.17.4.1 Section 106 Technical Studies Prepared for the Project

Table 3.17-3 identifies the technical studies that were prepared to support the EIR/EIS. The reports document the Authority's compliance with Section 106 of the NHPA. In general, the ASR and ASR Addendum document research efforts, known archaeological sites, newly discovered archaeological sites if any are identified, and consultation efforts with Native American tribes. The HASR documents research efforts, known historic built resources, newly identified historic built resources, and consultation efforts with historical interest groups and local agencies. The FOE documents how the Burbank to Los Angeles Project Section would affect historic properties—both archaeological and built. These documents inform the findings described in this section. The documents will be available on the project website, in redacted form to protect locational information of sensitive resources.

Table 3.17-3 Section 106 Technical Reports and Concurrence Dates

Report Title	Date	State Historic Preservation Officer Concurrence Date
<i>Burbank to Los Angeles Project Section Archaeological Survey Report (ASR)</i>	August 2017	June 9, 2017
<i>Burbank to Los Angeles Project Section Archaeological Survey Report (ASR): Addendum 1</i>	April 2019	March 25, 2019
<i>Burbank to Los Angeles Project Section Historic Architectural Survey Report (HASR)</i>	April 2019	May 2, 2019
<i>Finding of Effect (FOE)</i>	December 2019	[pending concurrence]

Stipulation VIII.A of the PA requires the Authority to develop an MOA for each project in which the FRA determines there would be an adverse effect on historic properties or when phased identification is necessary and adverse effects would occur. The MOA documenting agreement on the treatment of historic properties within the Burbank to Los Angeles Project Section is being developed with input from consulting parties and would be executed concurrently with the completion of the Final EIR/EIS and the Record of Decision by the Authority in its role as lead federal agency under NEPA Assignment. Following the execution of the MOA, and in accordance with PA Stipulations VIII.B.i and VIII.B.ii, the Authority would develop treatment plans—one for archaeological resources and one for historic built resources—to detail the treatment measures negotiated for all historic properties within the Burbank to Los Angeles Project Section. The ATP and Built Environment Treatment Plan (BETP) would define the process by which these treatment measures would be applied to each known resource identified in the MOA as being adversely affected and would also outline measures for the phased identification of historic properties as additional parcel access is obtained and design work is completed. The MOA and treatment plans provide specific performance standards that ensure each adverse effect would be avoided, minimized, or mitigated. The measures stipulated in the Section 106 consultation process have been coordinated with the measures outlined in this EIR/EIS. These measures would be incorporated into the design and construction documents to help ensure they are included in the project.

3.17.4.2 Agency, Native American, Interested Parties, and Public Outreach Efforts

CEQA, NEPA, and Section 106 of the NHPA each requires that outreach regarding cultural resources be conducted to government agencies, Native Americans, and other parties who may have a demonstrated historic preservation interest in a project. To the extent possible, the cultural resources outreach requirements for CEQA, NEPA, and Section 106 have been coordinated to identify interested parties early in the process to achieve maximum participation in identifying cultural resources, addressing impacts on cultural resources, and developing appropriate mitigation measures. The primary goals of this outreach are to help identify any cultural resources

of concern to these parties and to provide them an opportunity to become Section 106 consulting parties and participate in the development of significance findings, assessment of effect/impact, and development of mitigation measures. For this reason, cultural resources outreach for the project began in the early scoping phase of the process.

Guiding documents include the PA, which describes the process for consulting with Native Americans and other interested parties. Specifically, Stipulation V.A. of the PA states that, “the public and consulting parties would have an opportunity to comment and have concerns taken into account on findings identified in Section 106 survey and effects documented via attendance at public meetings where they can submit comments on the information presented, as well as access to the Section 106 documents via email requests to the Authority’s website.” Furthermore, Stipulation V.C specifies that tribal consulting parties shall be consulted at key milestones in the Section 106 and NEPA processes to gain input from the tribal governments. Consultation with the Section 106 consulting parties has remained ongoing throughout the environmental document preparation process and will continue through the construction phase of the project during implementation of the MOA and treatment plans.

Agency and Interested Party Outreach

Consultation with local, state, and federal agencies and other interested parties has been ongoing throughout the project planning process. Table 3.17-4 describes outreach to these potentially interested parties and includes local government planning departments, historic preservation organizations, historical societies, libraries, and museums. As per PA Stipulation V.A., these interested agencies, groups, and individuals were invited to comment on the significance findings and treatments proposed, and those with demonstrated interest in the project will be invited to participate as consulting parties in the preparation of the MOA.

Table 3.17-4 Summary of Outreach Efforts to Identify Agency and Other Interested Consulting Parties

Contact	Date	Summary
Burbank Historical Society	January 21, 2016	No response received.
City of Burbank Community Development Department, Planning and Transportation Division, Heritage Commission	January 21, 2016	No response received.
City of Glendale Library, Arts & Culture	January 21, 2016	No response received.
City of Glendale Planning Department, Historic Preservation Commission	January 21, 2016	City staff provided San Fernando Road Corridor survey document in July 2016.
Glendale Historical Society, Sean Bersell, Executive Director	January 21, 2016	Greg Grammer submitted an electronic comment card on March 23, 2016. Follow-up email sent to Greg Grammer on March 18, 2017. No response received.
San Fernando Valley Historical Society	January 21, 2016	No response received.
Pico Rivera History & Heritage Society	January 21, 2016	No response received.
Autry Museum of Western Heritage	January 25, 2016	No response received.
City of Los Angeles Office of Historic Resources, Department of City Planning, Ken Bernstein, Manager	January 25, 2016	City staff provided SurveyLA survey reports and data in August 2016. Office of Historic Resources confirmed consulting party status on March 8, 2017.
Friends of the Los Angeles River, Stephen Mejia, Community Programs Manager	January 25, 2016	No response received.

Contact	Date	Summary
Los Angeles City Historical Society, Todd Gaydowski, President	January 25, 2016	No response received.
Los Angeles Conservancy, Adrian Scott Fine, Director of Advocacy	January 25, 2016	Conservancy confirmed consulting party status in an email on August 2, 2016.
Los Angeles Railroad Heritage Foundation, Wendell Mortimer, President	January 25, 2016	No response received.
Kenn Bicknell at the Dorothy Peyton Gray Transportation Library & Archive	January 25, 2016	No response received.
Highland Park Heritage Trust, Antonio Castillo, President	January 25, 2016	No response received.
Los Angeles County Historic Landmarks & Records Commission, Louis E. Skelton, Chairman	January 25, 2016	No response received.
Los Angeles County Department of Regional Planning	January 25, 2016	In an email dated August 17, 2016, the Department of Regional Planning declined to consult on the Burbank to Los Angeles Project Section, as it does not include unincorporated county areas.
Archaeological Institute of America, Orange County Society, Ruth DeNault, President	January 25, 2016	No response received.
California Preservation Foundation, Cindy Heitzman, Executive Director	January 25, 2016	No response received.
Historical Society of Southern California, Kenneth Marcus, President	January 25, 2016	No response received.
Pacific Coast Archaeological Society, Megan Galway, President	January 25, 2016	No response received.
San Bernardino Railroad Historical Society, Paul Prine, President	January 25, 2016	No response received.
Southern Pacific Historical & Technical Society, John Signor	January 25, 2016	No response received.
Pacific Railroad Society	January 25, 2016	No response received.
California State Railroad Museum	January 25, 2016	No response received.
California State Parks, Office of Historic Preservation	January 25, 2016	No response received.
Conference of California Historical Societies	January 25, 2016	No response received.
California State University, Northridge Oviatt Library Digital Collections	January 25, 2016	No response received.
Chinese Historical Society of Southern California	January 25, 2016	No response received.
Society of Architectural Historians, Southern California Chapter, Sian Winship, President	January 25, 2016	No response received.
National Trust for Historic Preservation	January 25, 2016	No response received.

Contact	Date	Summary
Jewish Historical Society of Southern California	January 25, 2016	No response received.
Haramokngna American Indian Cultural Center	January 25, 2016	No response received.
USC Architecture and Fine Art Library	January 25, 2016	No response received.
USC Digital Library	January 25, 2016	No response received.
Electric Railway Historical Association of Southern California	January 27, 2016	No response received.
Southern California Association of Governments, Steve Fox, Senior Regional Planner	December 19, 2016	Email communication received from Southern California Association of Governments confirmed consulting party status.

Source: California High-Speed Rail Authority, 2019
 USC = University of Southern California

In January 2016, the Authority issued a letter to 36 local government planning departments, local government heritage/preservation commissions, and historical interest groups. The purpose of the letter was to provide current information regarding the planning and development of the proposed project and to invite participation in the cultural resources investigation that would be conducted in accordance with Section 106, as well as NEPA and CEQA. The letter also requested that the recipient contact the Authority if the recipient would like to be a consulting party in the Section 106 process. The Authority asked letter recipients to respond by the end of February 2016 if they wished to participate in consultation.

Table 3.17-4 also summarizes the outreach to federal, state, regional, and local agencies that may have responsibilities for historic properties and may want to review reports and findings for a project within their jurisdiction, as well as outreach to other potentially interested parties and individuals.

The Authority also contacted the City of Glendale Planning Department in July 2016 to request a copy of the San Fernando Road Corridor Survey, which was provided by city staff. In addition, the Authority contacted the City of Los Angeles Office of Historic Resources in August 2016 to request data from the city's SurveyLA citywide historic resources survey and information on potential TCPs within the project vicinity. City staff provided relevant survey reports and data to the Authority, and indicated that SurveyLA and the associated public outreach (known as MyHistoricLA) did not yield any properties that might be considered TCPs. On March 8, 2017, the Office of Historic Resources confirmed consulting party status via email from Janet Hansen, Deputy Manager.

On November 21, 2016, an invitation to Community Open Houses to be held on November 29, December 1, 5, and 6, 2016 in southern California was emailed to all potentially interested parties. No additional response cards were received from interested parties as a result of these Community Open House meetings.

Native American Outreach and Consultation

The Authority and the FRA engaged with tribal governments in the early stages of project development and during the preparation of the cultural resources studies by affording them the opportunity to participate in the cultural resources investigations throughout the project delivery process. In accordance with 36 C.F.R 800.2(c)(2) and the PA, federally recognized Native American tribes are to be given the opportunity to identify their concerns about historic properties, advise on the identification and evaluation of historic properties, articulate their views on the undertaking's effects on such properties, and participate in the resolution of adverse effects.

The Authority and FRA relied on the NAHC to identify those Native American tribal governments with whom it is most appropriate to consult for a given geographical area. These include both federally recognized and nonfederally recognized tribes. A revised/updated list of local tribes is

regularly obtained from the NAHC to ensure that the most current tribal contact information is used when communicating with tribal representatives.

For the Burbank to Los Angeles Project Section, the NAHC provided the Authority and its consultant a list of tribes and representatives in September 2009, October 2011, February 2014, March 2014, August 2014, and February 2015. In each instance, a request was made for a contact list of Native American tribes and representatives, and a review of the Sacred Lands File (SLF) for the project. On August 26, 2014, the Authority mailed letters to tribes and tribal representatives identified by the NAHC, inviting them to a September 25, 2014, Tribal Information Meeting (Authority and FRA 2019b). The following list indicates the tribes whose representatives were contacted:

- Barbareño-Ventureño Band of Mission Indians
- Coastal Band of the Chumash Nation
- Fernandeno Tataviam Band of Mission Indians
- Gabrieleno Tongva Indians of California Tribal Council
- Gabrieleño Band of Mission Indians—Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Kern Valley Indian Council
- Kitanemuk and Yowlumne Tejon Indians
- Los Angeles City/County Native American Indian Commission
- Owl Clan of the Chumash
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Santa Ynez Band of Chumash Indians
- Soboba Band of Luiseno Indians
- Tongva Ancestral Territorial Tribal Nation

Table 3.17-5 summarizes the outreach with Native American parties undertaken to date for this section. Native American outreach and consultation efforts have been ongoing at key milestones throughout the project planning process. Both federally recognized tribes and nonfederally recognized tribes were notified of the initiation of the Section 106 process for this project section, as outlined in Table 3.17-5, and were consulted during the preparation of the technical studies and notified they would be consulted during development of the MOA. Native American tribes have also been consulted about the APE and about potentially sensitive cultural and archaeological resources that could be present within the APE. The MOA will include provisions for phased identification of archaeological resources because of limited access to perform pedestrian archaeological surveys. The Authority and FRA would continue to consult with Native American tribes and individuals after the Record of Decision, as the previously inaccessible parcels are acquired, accessed, and surveyed. In addition to the meetings listed in Table 3.17-5, a meeting specific to this project section with the NAHC was held on March 9, 2017, to discuss ongoing outreach efforts.

Table 3.17-5 Summary of Outreach Efforts to Identify Native American Consulting/Concurring Parties

Action	Date	Summary
The Authority sent an email notifying members of local tribal communities regarding upcoming open house meetings for the Palmdale to Los Angeles Project Section.	May 13, 2014	Tribes were encouraged to participate in community open house meetings being offered May 20, 21, 28 and 29, 2014. The Tribes were also informed of an upcoming Tribal Information Meeting in fall 2014 to be scheduled.
The Authority sent an email notifying tribal communities of the publication of an NOI and NOP for the Palmdale to Burbank and Burbank to Los Angeles Project Sections. The notice indicated that the former Palmdale to Los Angeles Project Section had been split into two project sections.	July 25, 2014	Tribes were encouraged to participate in the public scoping meetings being offered August 5, 6, 7, 11, 12, 14, and 19, 2014. Links to information for each project section were provided on the project's website. It was noted again that a focused Tribal Information Meeting to address cultural resources concerns would be scheduled in fall 2014.
The Authority sent an invitation letter to 24 tribes and/or tribal representatives to invite their participation in an Authority-hosted Tribal Information Meeting scheduled for September 2014 to discuss matters of cultural resources concern for the Palmdale to Burbank and Burbank to Los Angeles Project Sections.	August 26, 2014	The Tribal Information Meeting invitation letter was also transmitted to all tribes with valid email addresses on August 27. Additional follow-up emails were sent on September 17 and 24 to further encourage participation in the Tribal Information Meeting.
The Authority hosted a Tribal Information Meeting/teleconference.	September 25, 2014	<p>Representatives from five tribes attended the Tribal Information Meeting:</p> <ul style="list-style-type: none"> ▪ San Manuel Band of Mission Indians ▪ Fernandeano Tataviam Band of Mission Indians ▪ Gabrieleño Band of Mission Indians—Kizh Nation ▪ Tongva Ancestral Territorial Tribal Nation ▪ Gabrielino/Tongva Nation ▪ No tribal affiliation (Jim Folkes and Beverly Salazar Folkes) <p>Five additional tribes expressed interest in attending the Tribal Information Meeting but were unable to participate; however, these tribes expressed the desire to be kept informed of the project.</p>
The Authority sent a summary of the September 25 Tribal Information Meeting to all meeting participants and tribes who expressed interest but could not attend.	October 7, 2014	The Authority indicated that it would seek to identify those Tribes that wished to become consulting parties under Section 106 for the Burbank to Los Angeles Project Section. The Authority sent a series of emails in late September/early October to determine the Tribes' interests in becoming Section 106 consulting parties.
The Authority conducted email outreach to the Palmdale to Burbank and Burbank to Los Angeles Project Section tribal representatives.	October 27, 2014	The Authority reiterated via email that planning efforts were moving forward to identify suitable alignment alternatives for the project sections. The Authority encouraged the tribes to contact and arrange a time to meet with the Authority/FRA to be part of the alternatives analysis process.

Action	Date	Summary
The Authority received an email response from the Fernandeano Tataviam Band of Mission Indians regarding the September 25 meeting.	November 12, 2014	Ms. Caitlin Gulley extended the Tribe's consultation agreement template to the Authority. However, per the PA, the Authority cannot enter into individual agreements with Tribes. The Authority provided Ms. Gulley with consulting party information via email.
Email communication occurred between the Authority and the Fernandeano Tataviam Band of Mission Indians representative.	December 16, 2014	Emails were exchanged to follow up on the December 8, 2014, teleconference regarding the Palmdale to Burbank Project Section. Some discussion of LAUS also occurred. Ms. Fatehi and Ms. Allred discussed the schedule.
The Authority and the Fernandeano Tataviam Band of Mission Indians exchanged communication.	January 6, 2015	The Tribe signed and sent the consulting party form on January 6, 2015. On January 23, 2015, the Authority confirmed receipt and stated that it could not reimburse for Section 106 consultation.
The Authority communicated via email with the Gabrieleño Band of Mission Indians—Kizh Nation	January 9, 2015	The Authority confirmed consulting party participation for the Gabrieleño Band of Mission Indians—Kizh Nation.
The Authority received a letter from the Soboba Band of Luiseno Indians.	June 4, 2015	The Authority received a letter requesting government-to-government consultation under Section 106, to be lead consulting tribal entity, that Soboba Band of Luiseno Indians monitors be present, etc.
The Authority responded to an email from the Soboba Band of Luiseno Indians.	June 16, 2015	<p>The Authority responded to the letter dated June 4, offering potential dates to meet, providing the consulting party participation form, providing information regarding tribal monitoring policies, describing the PA and protocols for treatment of human remains, and discussing the tribal involvement in the MOA.</p> <p>In response to the Authority's email, the Soboba Band of Luiseno Indians sent a response (June 16) indicating the Tribe is not legally obligated to fill out the consulting party participation form but that the FRA is still required to consult with them.</p> <p>The FRA reached out on June 17 via email, with no response from the tribe. The FRA reached out again in July, and the Tribe responded July 30. The meeting was rescheduled for August 5, 2015.</p>
The Authority received an email from the Gabrieleño Band of Mission Indians—Kizh Nation	July 23, 2015	The Tribe formally requested consultation/notification under AB 52. The Tribe was notified that, because the NOP filing date preceded July 1, 2015, consultation does not occur under AB 52.

Action	Date	Summary
A telephone meeting occurred among the Authority, the FRA, and the Soboba Band of Luiseno Indians. The Authority sent a summary email to participants.	August 5, 2015	The telephone meeting confirmed the project sections that the Tribe is interested in and discussed the status of those project sections. The tribe declined to complete the consulting party participation form. The parties discussed the Tribe's participation in the development of the MOA. Also, the Authority agreed to provide the GIS files requested by the Tribe. Subsequent communication with Soboba Band of Luiseno Indians representatives continued but did not include the Burbank to Los Angeles Project Section.
The Authority communicated with all tribes on the NAHC contact list via email.	October 26, 2015	All Tribes on the Tribal Contact List provided by the NAHC were sent announcement/notification regarding the schedule for a series of public open house meetings for the Burbank to Los Angeles Project Section. However, it was also stated that an invitation-only Tribal Information Meeting would be held in the near future.
The Authority received an email from the Tongva Ancestral Territorial Tribal Nation.	November 17, 2015	The Tribe requested formal consultation under AB 52. The tribe was notified that since the NOP filing date preceded July 1, 2015, consultation does not occur under AB 52.
The Authority and the Fernandefio Tataviam Band of Mission Indians participated in a focused meeting.	February 24, 2016	The meeting with the Tribe involved discussion of various project sections and the Tribe's involvement, proposed revisions to the PA, and input from tribes, etc.
A teleconference including the Authority and the Gabrieleño Band of Mission Indians—Kizh Nation was held.	March 8, 2016	The teleconference involved discussion of the Tribe's concerns in the project vicinity, as well as the Tribe's involvement in the project regarding cultural resource investigations, archaeological surveys, and contributing to technical reports, etc.
The Authority received an email from the Gabrieleño Band of Mission Indians—Kizh Nation.	May 4, 2016	A tribal representative provided the Authority with an ethnographic article and documents.
The Authority communicated via email with the Fernandefio Tataviam Band of Mission Indians.	May 4, 2016	The Authority followed up after the February meeting and confirmed that the Tribe is a consulting party. Consulting party forms were attached to the email.
The Authority and the Gabrieleño Band of Mission Indians—Kizh Nation communicated via phone and email.	May 13, 2016, and June 1, 2016	Dr. Gary Stickel agreed to prepare the Tribe's ethnographic contributions to cultural technical reports, discussed dates that contributions would be needed, and exchanged articles and draft ASR examples.
The Authority sent the draft ASR to consulting parties	May 16, 2017	The Authority sent the Fernandefio Tataviam Tribe and the Gabrieleño Band of Mission Indians—Kizh Nation the Burbank to Los Angeles Project Section draft ASR for their review and comment.
The Authority and the Gabrieleño Band of Mission Indians—Kizh Nation communicated via email.	June 27, 2016	The Tribe provided the Authority with Disadvantaged Business Enterprise and Minority Business Enterprise certification.
The Authority and the Fernandefio Tataviam Band of Mission Indians communicated via email.	July 29, 2016	The tribe indicated it would like to contribute ethnography and inquired regarding due date and length.

Action	Date	Summary
The Authority provided opportunities to author tribal ethnographies for inclusion in the ASRs.	August 2017	To date, the Fernandefio Tataviam Band of Mission Indians and the Gabrieleño Band of Mission Indians—Kizh Nation have provided tribal ethnographies that have been incorporated into the Final (August 2017) ASR.
Provided opportunities to review and comment on draft cultural resources technical reports prior to finalization.	Ongoing	Tribal consulting parties reviewed and provided comments on the May 2017 ASR. Future archaeological cultural resource documents, including ASR addenda, the ATP, and the MOA will be reviewed by tribal consulting parties, consistent with the Section 106 PA.
Provided opportunities to participate in pedestrian field surveys.	To be determined	No archaeological field survey has been conducted for the undertaking because permissions to enter parcels and rights-of-way in the APE have not been secured. Archaeological survey will be undertaken for the project in a phased approach to historic property identification, consistent with the Section 106 PA. It is FRA and Authority policy to offer local Tribes an opportunity to participate in archaeological field surveys. Tribal participation in future field surveys will be stipulated in the MOA.
Provide opportunities to monitor ground-disturbing activities in culturally sensitive areas.	To be determined	It is FRA and Authority policy to offer local Tribes an opportunity to monitor ground-disturbing activities in culturally sensitive areas. Tribal participation in future monitoring efforts will be stipulated in the MOA.
Provide opportunities to help develop treatment and mitigation for effects on significant cultural resources.	To be determined	The MOA to be prepared for the undertaking, which will stipulate procedures for treating adverse effects on historical properties, will be written with tribal participation.

Source: California High-Speed Rail Authority and Federal Railroad Administration, 2019a

AB = Assembly Bill
 APE = area of potential effects
 ASR = archaeological survey report
 ATP = Archaeological Treatment Plan
 Authority = California High-Speed Rail Authority
 FRA = Federal Railroad Administration
 GIS = geographic information system
 LAUS = Los Angeles Union Station
 MOA = memorandum of agreement
 NAHC = Native American Heritage Commission
 NOI = notice of intent
 NOP = Notice of Preparation
 PA = programmatic agreement

As a result of the Authority's outreach, three tribes have elected to become consulting parties for the Burbank to Los Angeles Project Section and will therefore participate in the cultural investigations; please refer to Table 3.17-6. No other tribes have responded to the Authority's request to participate in the project or to become consulting parties. However, Native American outreach activities are ongoing, and tribes whose traditional territory includes the Burbank to Los Angeles Project Section would be consulted at each key decision point of the Section 106, CEQA, and NEPA processes in accordance with the framework provided in Attachment E of the PA.

As discussed in Section 3.17.2, federal and state laws exempt from disclosure information regarding the location of Native American archaeological and other culturally sensitive sites. Therefore, the locations of such sites are not included in this chapter.

Consulting Parties

Table 3.17-6 presents the entities (as of December 2019) that have elected to become Section 106 consulting parties for the cultural resources investigation and the preparation of the MOA.

Table 3.17-6 Consulting Parties in the Preparation of the Memorandum of Agreement

Name of Entity
Fernandeño Tataviam Band of Mission Indians
Gabrieleño Band of Mission Indians—Kizh Nation
Gabrielino/Tongva Nation
Los Angeles Conservancy
Southern California Association of Governments
City of Los Angeles Office of Historic Resources
California Department of Transportation (Caltrans District 7)
Los Angeles County Department of Regional Planning
U.S. Army Corps of Engineers
California State Transportation Board
Federal Railroad Administration
Advisory Council on Historic Preservation
California State Historic Preservation Officer

Source: California High-Speed Rail Authority, 2019

3.17.5 Methods for Evaluating Impacts

The following sections summarize the RSAs and the methods used to analyze impacts on cultural resources. As summarized in Section 3.17.1, Introduction, six other sections or chapters also provide additional information related to cultural resources: Section 3.4, Noise and Vibration; Section 3.12, Socioeconomics and Communities ; Section 3.16, Aesthetics and Visual Resources; 3.19, Cumulative Impacts; Chapter 4, Section 4(f) and Section 6(f) Evaluations; and Chapter 5, Environmental Justice.

Methods for identifying and evaluating the significance of historic properties and historical resources, and assessing impacts on these properties and resources for the Burbank to Los Angeles Project Section, were conducted in accordance with the Section 106 PA.¹ The PA provides an overall framework for conducting the Section 106 process, including outreach and consultation efforts, delineation of the APE, historic properties identification procedures, assessment of adverse effects and treatment of historic properties, documentation standards, and state and federal agency oversight in compliance with the NHPA. Additional direction by the Authority provides guidance in compliance with NEPA and CEQA. The FOE report documents the assessment of known and potential adverse effects on historic properties as a result of project construction or operation. Assessment of impacts to CEQA-only resources are also included in the FOE.²

3.17.5.1 Definition of Resource Study Areas

The RSAs are the geographic boundaries within which the Authority and FRA conducted environmental investigations specific to each resource topic. The Section 106 process uses the term “area of potential effects” for the study area established for cultural resources surveys and analyses. Regulations implementing Section 106 of the NHPA require that an APE be established by the lead agency for all federal projects (36 C.F.R. 800.4(a)(1)). The APE is the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist (36 C.F.R. 800.16(d)). Prior to establishing

¹ Refer to Section 3.17.1 for definitions of “historic properties” under the NHPA and “historical resources” under CEQA.

² The FOE has not been submitted to SHPO and consulting parties for review.

the APEs, during the early stages of project design, a resource study area was delineated to initiate pre-survey studies, including a records search at the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC), and preliminary archival research. Two distinct APEs were delineated for the purpose of this project: one for archaeology, and one for architectural or built resources. The APEs were delineated to consider both construction-related effects as well as operational effects. Both APEs were established following guidelines provided for in Attachment B of the PA (Authority and FRA 2011).

What is the Area of Potential Effects?

The area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, as defined in Code of Federal Regulations Title 36, Part 800.16(d). In the Burbank to Los Angeles Project Section, different APEs have been established for archaeological properties and historic architectural properties.

The two APEs were revised during the course of environmental review to reflect updated project information as well as ongoing field efforts that clarify whether individual properties would face direct or indirect effects as a result of the HSR Build Alternative. The APEs are based on the level of design as of November 2018, which is 15 percent design. The APE was first delineated in 2016. As the project footprint was updated, the APE boundary was increased to add new footprint areas but was not decreased to omit areas associated with prior footprints. This conservative additive approach was used to retain information on previously surveyed areas for use in the event of future footprint changes. The APE figures will be updated in accordance with the stipulations of the Section 106 PA and the Burbank to Los Angeles Project Section MOA when fully developed. The survey and impacts analysis under CEQA also uses these APEs.

The APE for impacts on archaeological resources includes the project footprint and areas that could be subject to ground-disturbing activities. The APE for impacts on historic built (architectural) resources includes the project footprint plus all parcels abutting the railroad right-of-way, proposed grade separations, and other new construction, such as street improvements. Table 3.17-7 provides a general definition and boundary description for each APE within the Burbank to Los Angeles Project Section. The APEs are described further below.

Table 3.17-7 Definition of Resource Study Areas (Areas of Potential Effect)

General Definition	Resource Study Area Boundary and Definition
Archaeological APE	Proposed project footprint plus area that could be subject to ground-disturbing activities. The vertical APE includes the maximum depth of ground disturbance.
Historic Built Resources APE	Proposed project footprint plus all parcels abutting the railroad right-of-way, the proposed grade separations, and the other associated construction, such as street improvements. (Refer to Figure 3.17-1 [Sheets 1 through 8]. Please note, eligible historic built resources do not occur on all sheets of the figure.)

APE = area of potential effect

Archaeological Area of Potential Effects

The APE for archaeological properties was established in accordance with Attachment B and Stipulation VI.A of the Section 106 PA. The archaeological APE is the area of ground proposed to be disturbed before, during, and after construction as well as during operation. Ground-disturbing activities may include, but are not limited to, excavation for the vertical and horizontal profiles of the alignment, station location footprints, geotechnical drilling, grading, cut-and-fill, easements, staging/laydown areas, utility relocation, borrow sites, spoils areas, temporary or permanent road construction, infrastructure demolition, and all permanent rights-of-way (i.e., the project footprint).

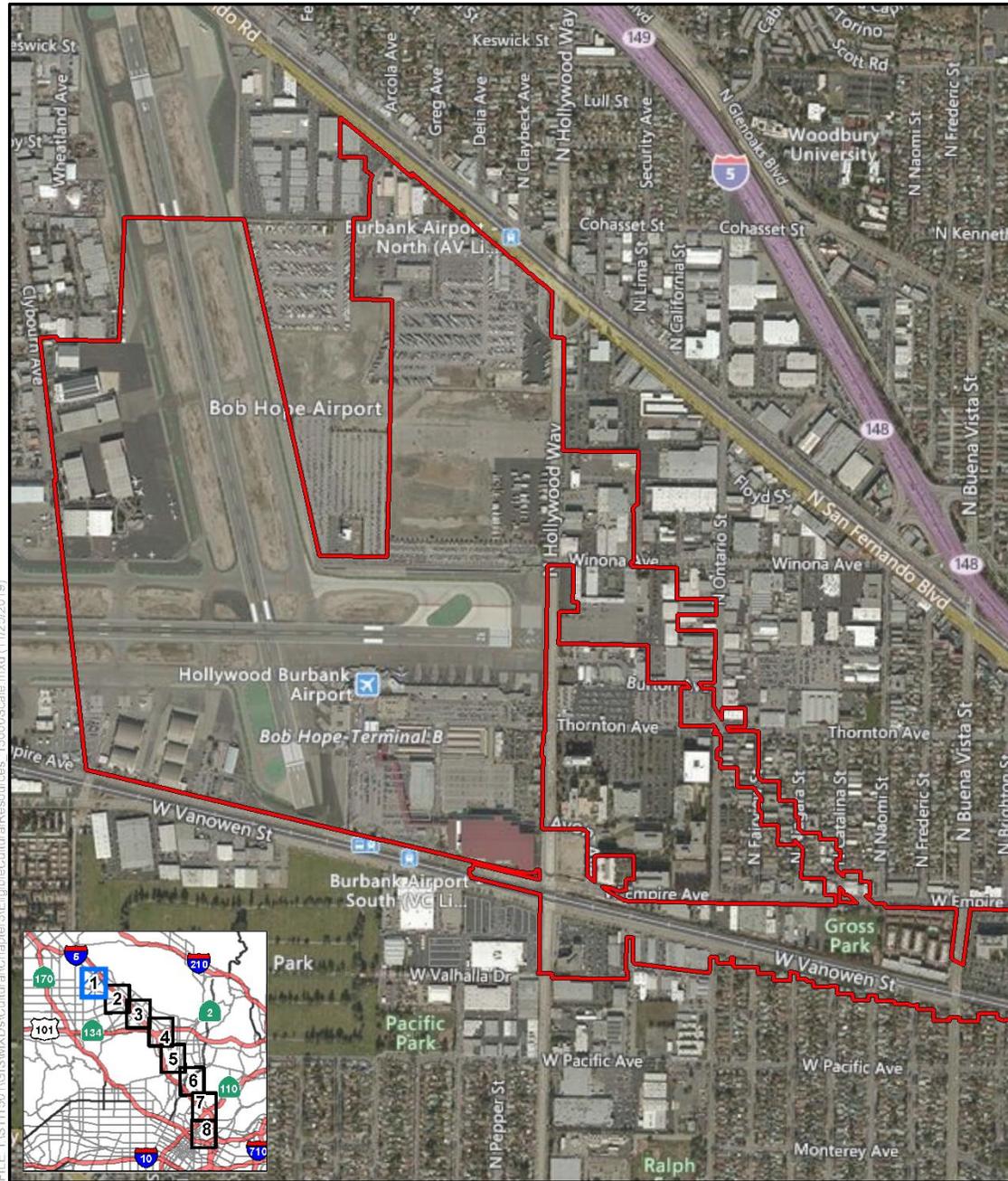
The vertical archaeological APE was delineated in coordination with project engineers and includes maximum depth of ground disturbance for various features of the project. The vertical archaeological APE for certain key features includes the following:

- Track work built at grade would mainly involve excavation with general construction equipment (e.g., scrapers, trackhoes, backhoes, bulldozers) to a depth of approximately 5 feet below the current grade.
- The depth of excavation for any undercrossings or overcrossings would be dictated by the depth of existing utilities and may extend up to 30 feet below grade.
- The depth of excavation for the below-grade alignment could vary from 90 to 160 feet below grade, depending on the depth of underground station and alignment.
- The depth of excavation for the underground station at Hollywood Burbank Airport would be approximately 170 feet below grade.
- Cast-in-drilled-hole piles would be built for the supports for the bridgework at Verdugo Wash, Colorado Street, Los Feliz Boulevard, Glendale Boulevard, and the Los Angeles River, they and would be drilled to a depth ranging from approximately 50 to 120 feet.
- Relocation of oil lines and fiber-optic lines within the railroad right-of-way to San Fernando Road would require directional drilling along San Fernando Road at depths of approximately 40 to 100 feet along the length of the HSR alignment, with access pits approximately 12 feet wide by 300 feet long and spaced approximately every 1,000 feet.

Historic Built Resources Area of Potential Effects

The historic built resources APE for the Burbank to Los Angeles Project Section includes all legal parcels intersected by the proposed project footprint, including proposed ancillary features such as grade separations, stations, and construction staging areas (Figure 3.17-1). The locations of the historic built resources identified in Figure 3.17-1 are keyed to Table 3.17-9, Table 3.17-10, and Table 3.17-11. The historic built resources APE is larger than the project footprint. It is delineated to take into consideration non-physical effects, such as visual, audible, or atmospheric intrusions to a property, shadow effects, the potential for vibration-induced damage, or isolation of a property from its setting. Visual and audible changes have the potential to adversely affect character-defining features of some historic built resources. This methodology for establishing the historic built resources APE follows standard practices for the discipline. Attachment B of the PA and the Authority's *Cultural Resources Technical Guidance Memorandum #7* (Authority 2016b) provide guidance in the delineation of the APE. Also in compliance with the PA, all legal parcels within the APE that contained buildings, structures, objects, sites, and districts that were at least 50 years of age at the time of the survey were studied. The surveys were conducted in June, July, August, November, and December 2016, and February 2017.

Specifically, the historic built resources APE includes all areas that the HSR Build Alternative could physically affect, including the railroad right-of-way where the HSR would be built, the street right-of-way along San Fernando Road where underground utility lines would be relocated from the railroad right-of-way, and the footprint of the proposed grade separations and other project-related construction work, including alterations to streets or bridges, temporary construction easements, permanent acquisitions, and properties that would be physically altered or demolished. The historic built resources APE also includes areas the HSR Build Alternative could have potential non-physical effects on, including visual impacts from the construction of the HSR track with overhead contact system (OCS), other vertical elements such as grade separations or transmission towers, and potential noise or vibration from the construction and operation of the HSR Build Alternative. Along San Fernando Road, in places where no work other than underground utility relocation within the public street was proposed, abutting parcels were not included in the APE because there is no potential for direct or indirect effects on historic properties.



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 SOURCE: Bing Maps (2018); CHSRA (11/2019), County of Los Angeles (2015)

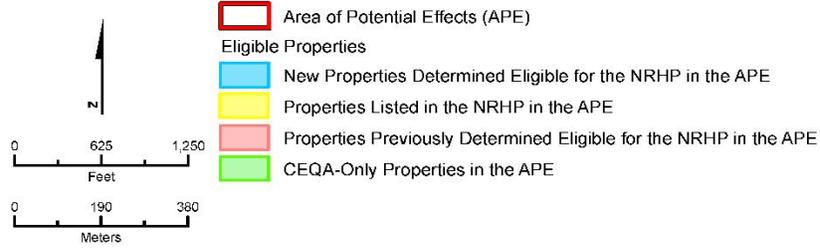
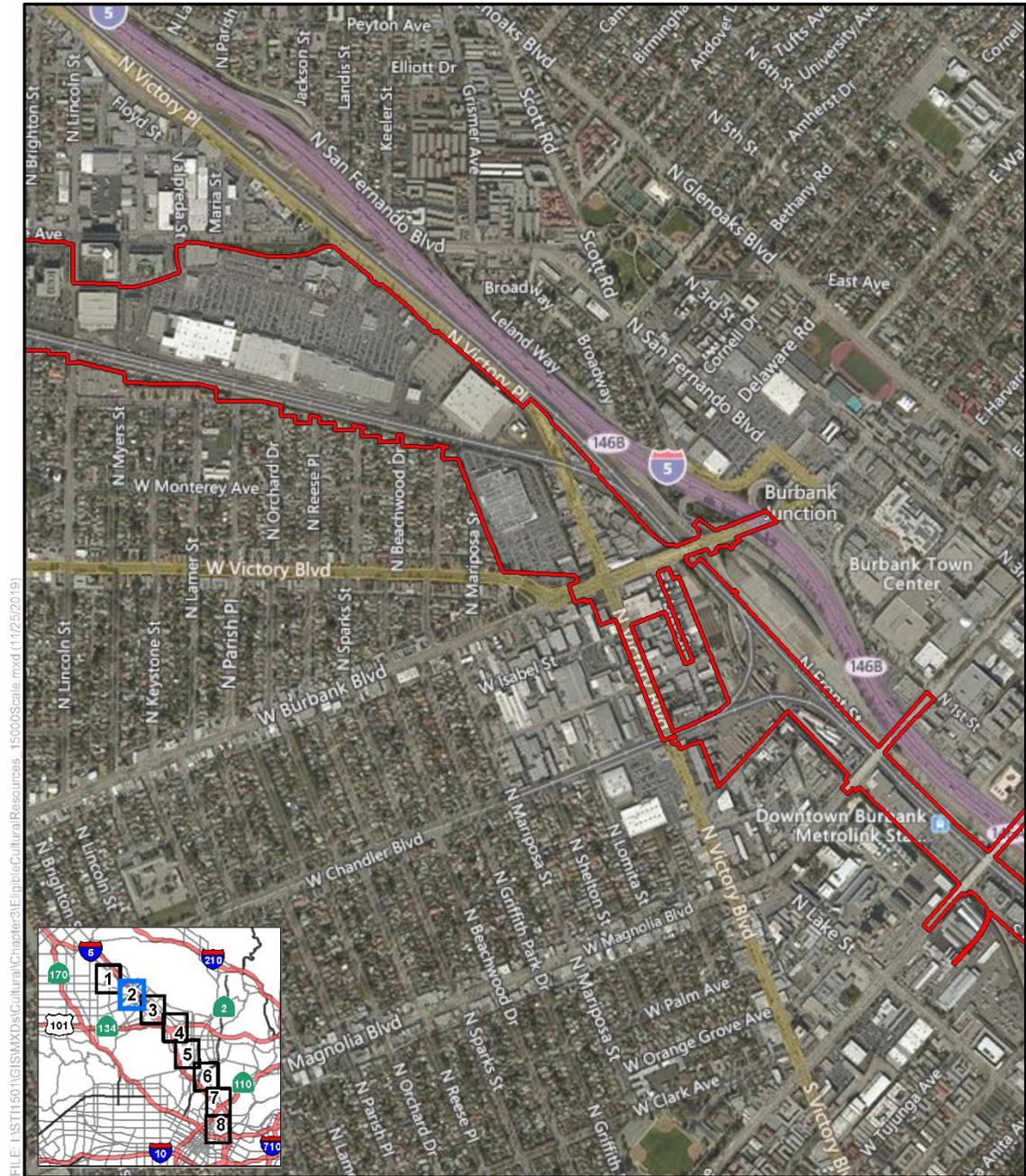


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 1 of 8)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 SOURCE: Bing Maps (2018); CHSRA (11/2019), County of Los Angeles (2015)

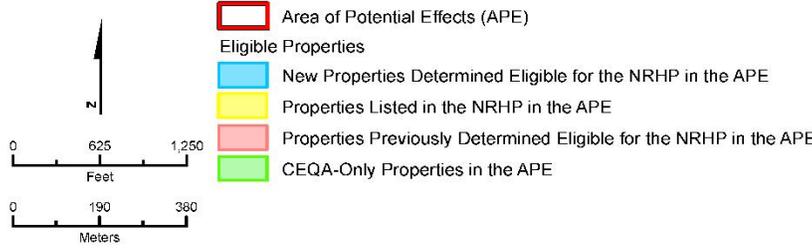
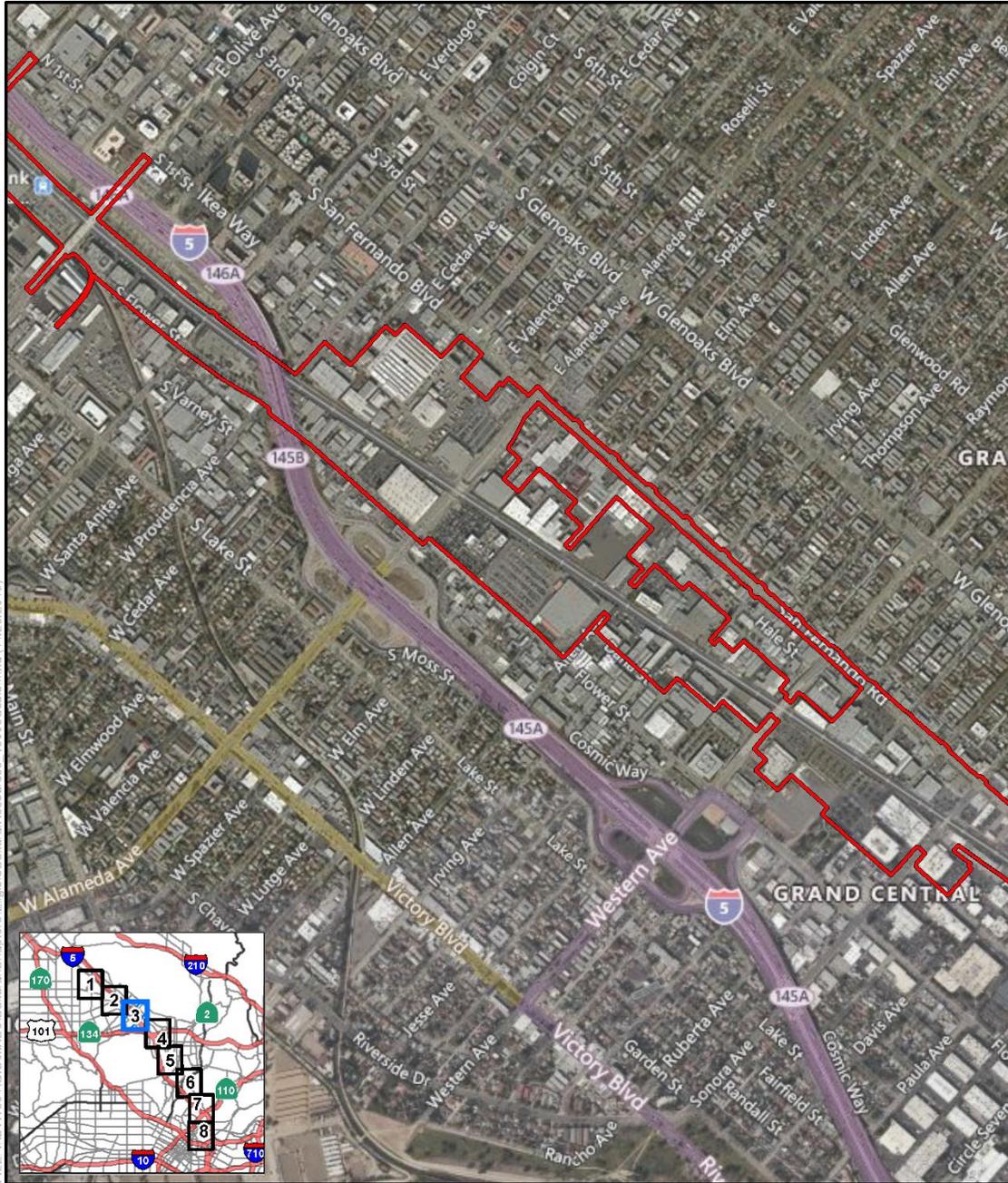


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 2 of 8)



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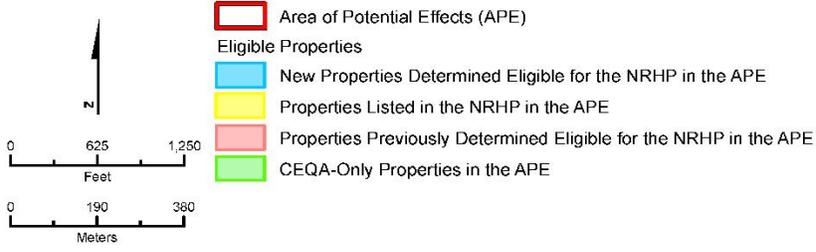
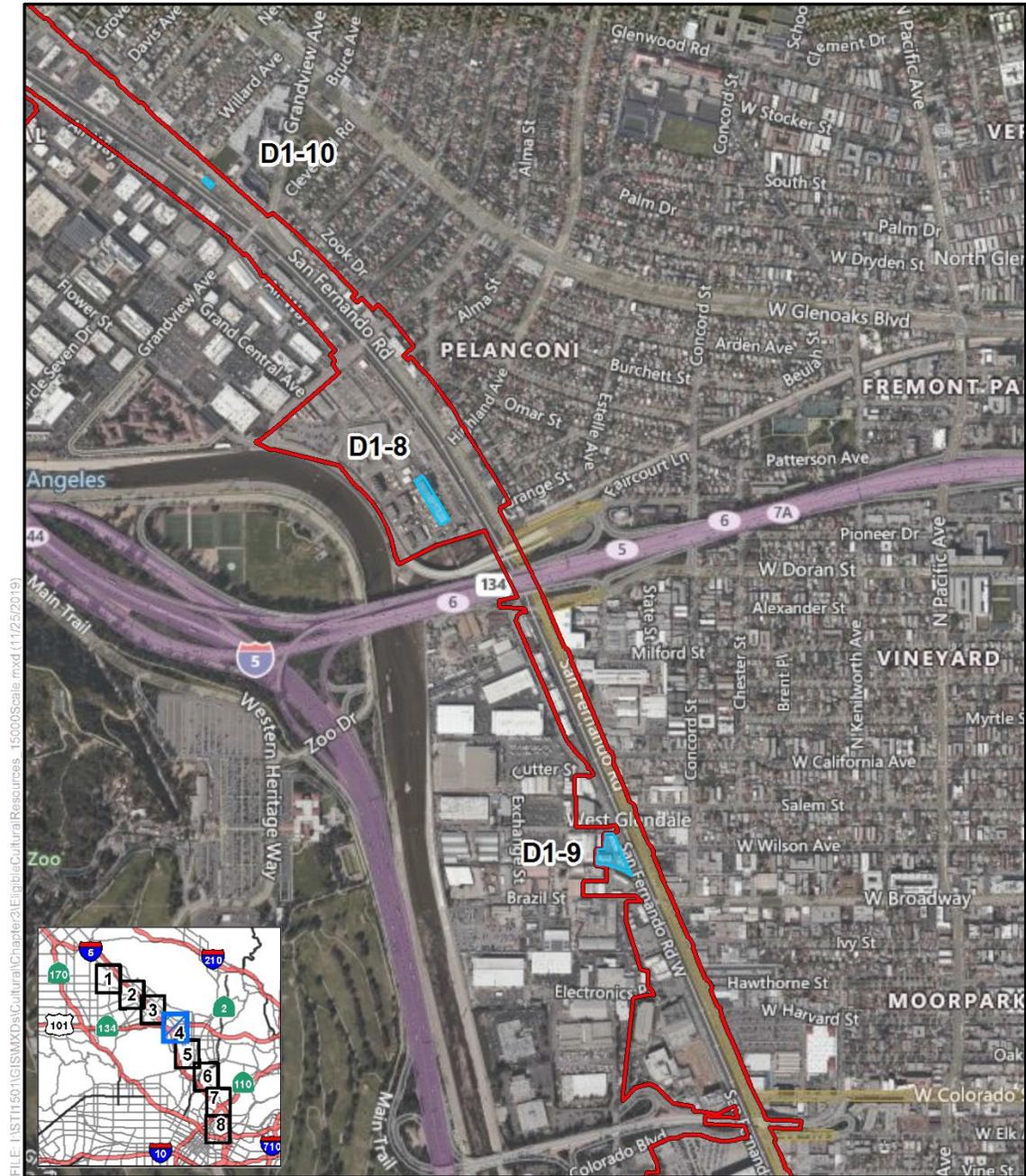


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 3 of 8)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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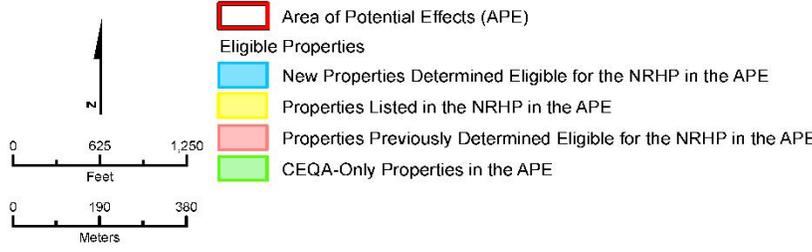
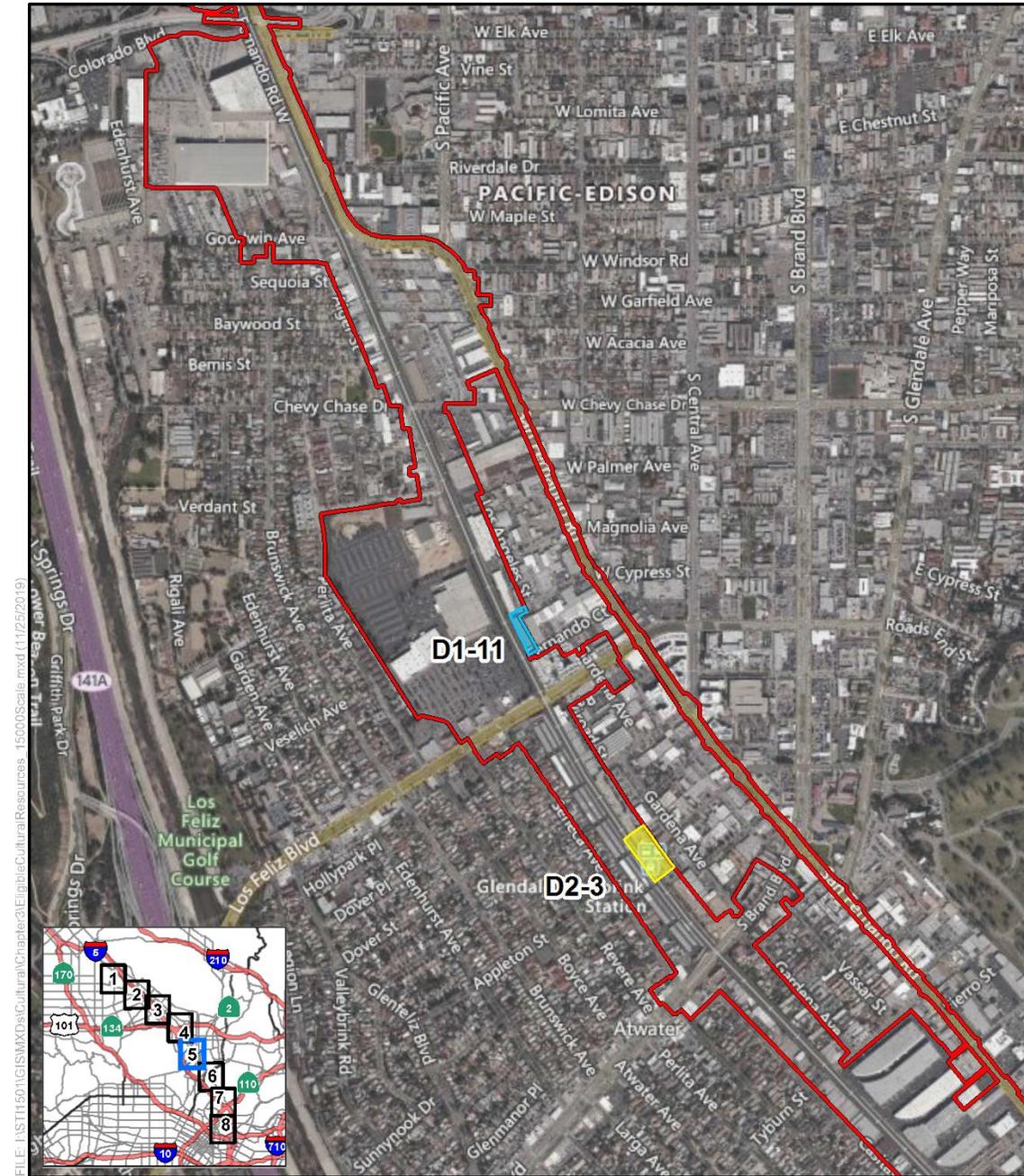


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 4 of 8)



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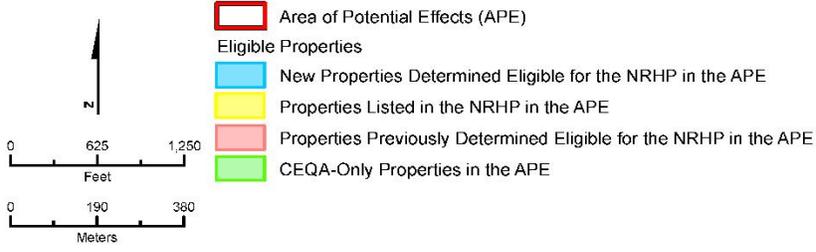
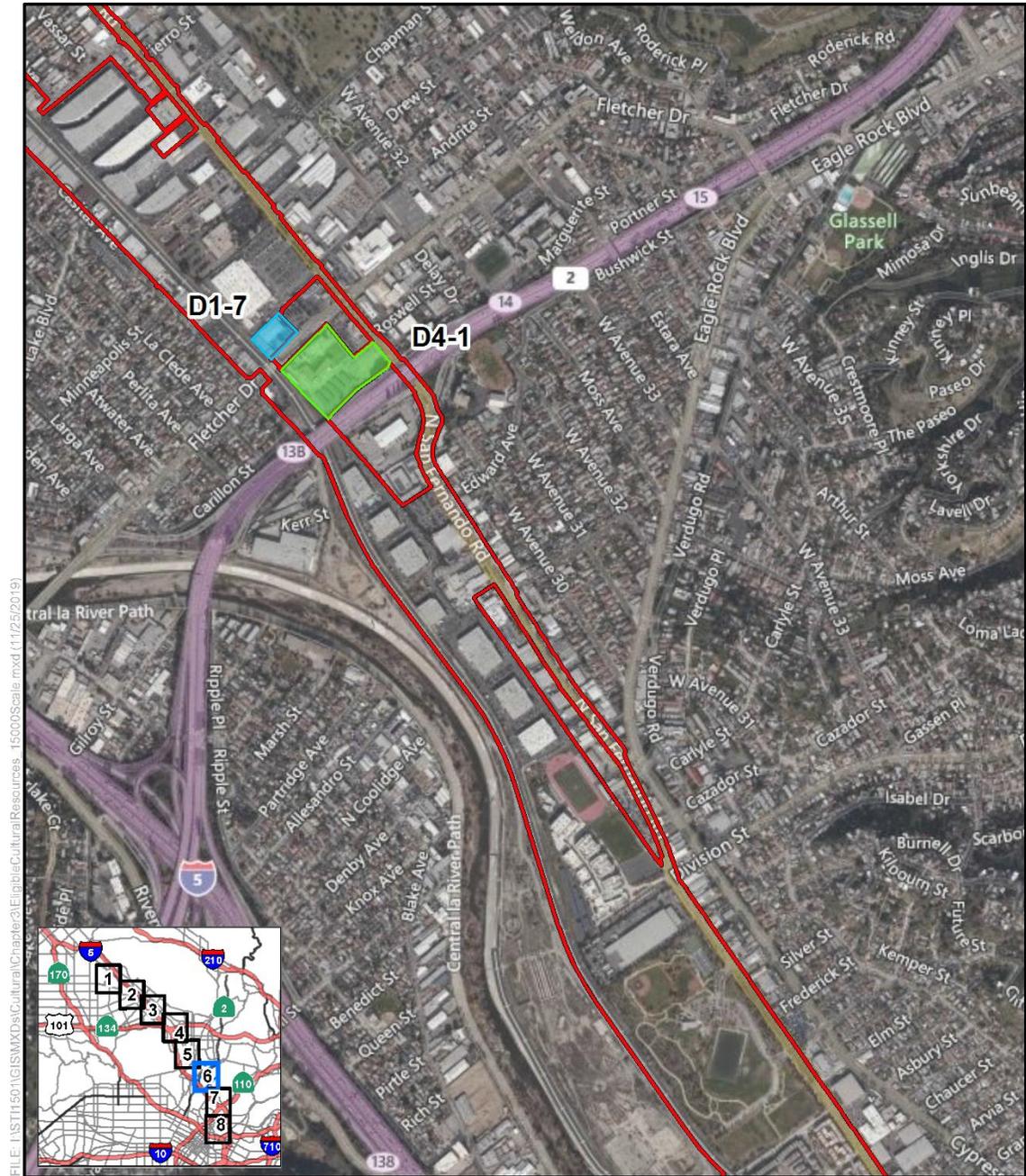


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 5 of 8)



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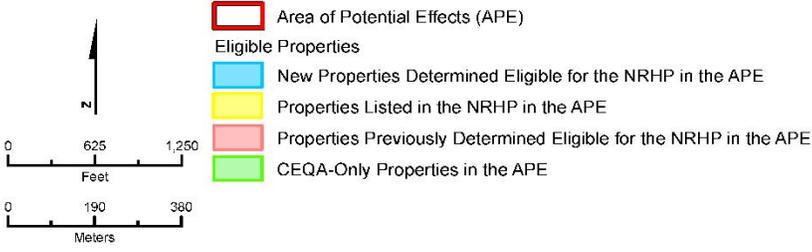
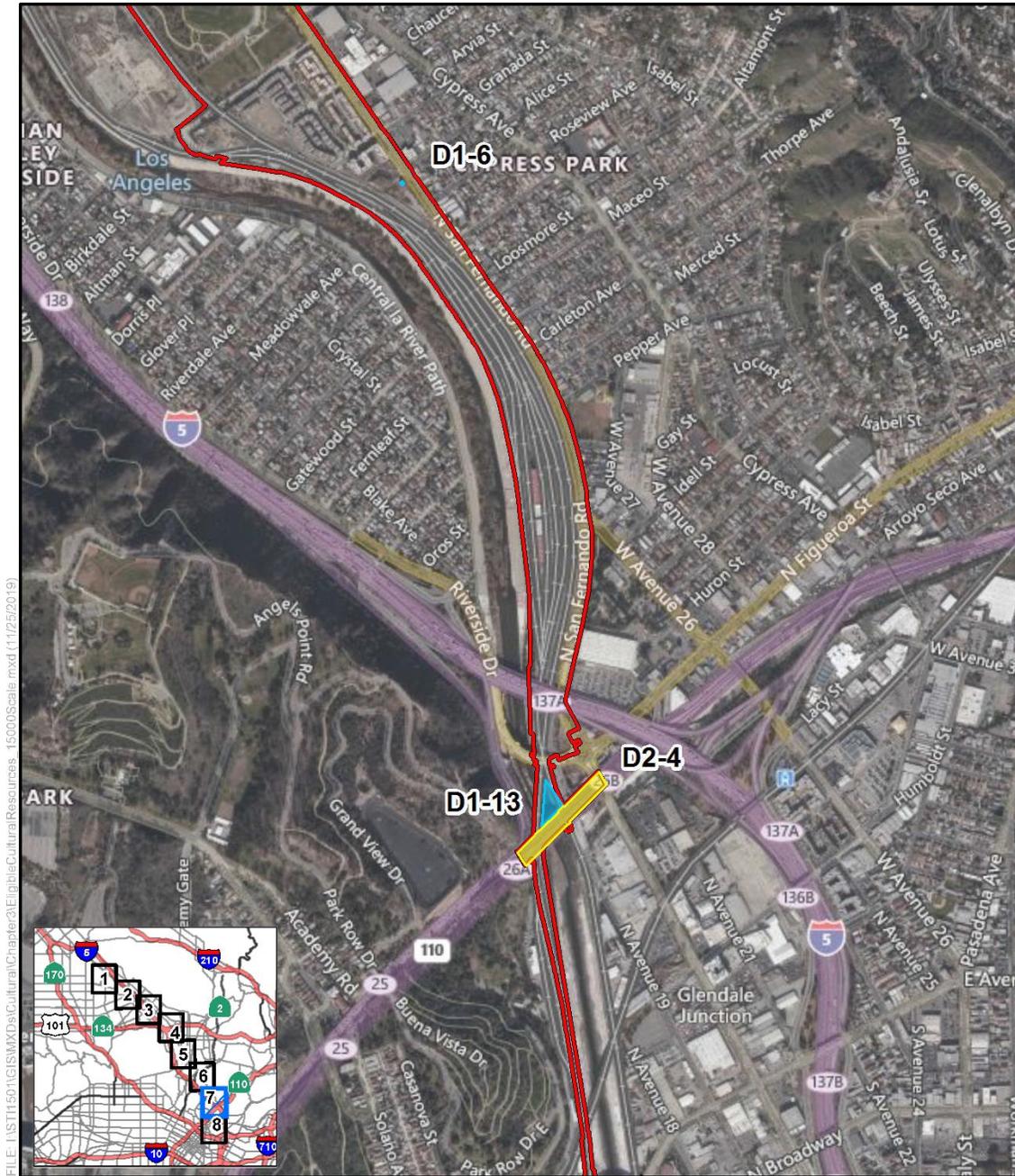


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 6 of 8)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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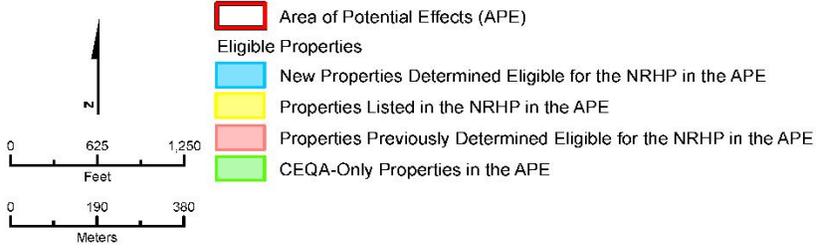
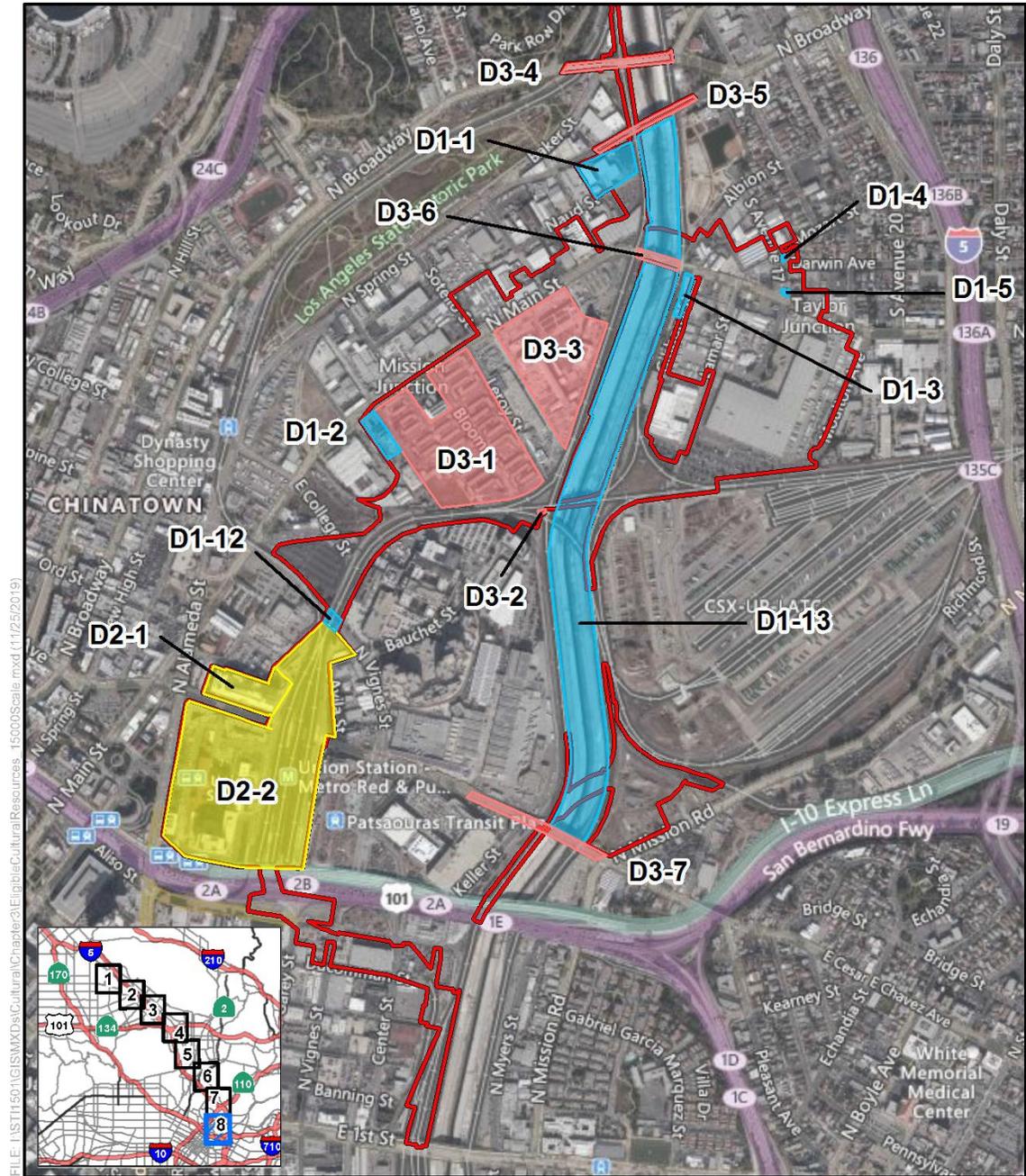


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 7 of 8)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
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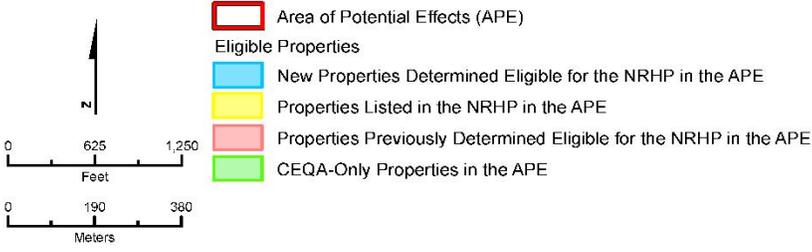


Figure 3.17-1 Eligible Historic Built Resources in the Area of Potential Effects
 (Sheet 8 of 8)

This methodology for establishing the historic built resources APE follows standard practices for the discipline, Attachment B of the PA, and the Authority's *Cultural Resources Technical Guidance Memorandum #7* (Authority 2016b). The APE includes:

- Properties within the proposed right-of-way.
- Properties where historic materials or associated landscape features would be demolished, moved, or altered by construction.
- Properties near the project where railroad materials, features, and activities have not been part of the historic setting and where the introduction of visual or audible elements may affect the use or characteristics of those properties that would be the basis for their eligibility for listing in the NRHP.
- Properties near the project that were either used by a railroad, served by a railroad, or where railroad materials, features, and activities have long been part of their historic setting.
- Parcels that would be included when delineating an APE, even if they are empty or would otherwise be exempt per PA Attachment D. This provides a record of which properties were exempted; no other documentation of such properties is required.

Cultural Resource Data Sources

In December 2015 and January 2018, records searches were conducted at the CHRIS at the SCCIC at California State University, Fullerton. Due to the linear nature of the Burbank to Los Angeles Project Section, the density of the surrounding area, and the proposed footprint along an existing rail corridor that is confined by a river on one side, the records request search for the area between Alameda Avenue and Los Angeles Union Station (LAUS) was limited to a 0.125-mile radius from the centerline of the alignment.

Furthermore, a records search for the area north of Alameda Avenue to the Burbank Airport Station was conducted in January, February, and May 2016 as part of a larger records search for the Palmdale to Burbank Project Section. The records search for this area was limited to a 0.5-mile radius from the centerline of the alignment, due to the lower-density and more rural nature of much of the Palmdale to Burbank Project Section and the fact that the alignments considered were not always limited to an existing rail corridor. It should be noted that the project footprint has been adjusted since all of the previously mentioned record searches were completed. As a result, the record search results included in the ASR and HASR discuss some resources and reports that are farther than 0.125 mile from the current Burbank to Los Angeles Project Section footprint and farther than 0.5 mile from the current Palmdale to Burbank Project Section footprint.

In addition to the records searches, a search of the SLF at the NAHC was requested on September 2009, October 2011, February 2014, March 2014, August 2014, and February 2015. The Authority relies on the NAHC to conduct searches of the SLF to determine the potential presence of sensitive Native American cultural resources and to provide contact information for NAHC-recognized tribal governments with whom the Authority and FRA may consult for the RSAs.

California Historical Resources Information System

The California Historical Resources Information System (CHRIS) consists of the California Office of Historic Preservation, nine Information Centers, and the State Historical Resources Commission. The California Office of Historic Preservation administers and coordinates the CHRIS and presents proposed CHRIS policies to the State Historical Resources Commission, which approves these policies in public meetings. The CHRIS Inventory includes the State Historic Resources Inventory maintained by the California Office of Historic Preservation, as defined in California Public Resources Code § 5020.1(p), and the larger number of resource records and research reports managed under contract by the nine Information Centers.

The SCCIC records searches yielded 64 previously recorded built resources and 128 previously conducted studies. The results of the NAHC SLF searches are as follows:

- September 10, 2009, Palmdale to San Fernando Section—The SLF indicated the presence of Native American cultural resources within 0.5 mile of the APE in the Agua Dulce, Acton, and River Ridge U.S. Geological Survey (USGS) quadrangles.
- October 26, 2011, Palmdale to Sylmar Section—Native American cultural resources were identified in the *Acton, Newhall, and Ritter Ridge* USGS quadrangles.
- February 19, 2014, Palmdale to Los Angeles Section—The SLF indicated the presence of Native American TCPs in the Ritter Ridge USGS quadrangle and recorded sites near the APE in the Acton, Agua Dulce, and Lancaster West USGS quadrangles.
- March 3, 2014, Sylmar to Los Angeles Section—The SLF search indicated the presence of Native American TCPs in the Hollywood and Los Angeles USGS quadrangles, near LAUS and the Metropolitan Water District headquarters, as well as the La Plaza Historic District in downtown Los Angeles.
- August 11, 2014, Los Angeles County—The NAHC provided a Native American contact list.
- February 10, 2016, Los Angeles County—The SLF did not indicate the presence of Native American cultural resources in the immediate project vicinity.

In addition, the Office of Historic Preservation’s 2012 *Archaeological Determinations of Eligibility for Los Angeles County* was reviewed. That document includes archaeological historic properties that are listed, or eligible for listing, on the NRHP and the CRHR.

Research included a review of the following historical maps to address the potential for encountering buried historic-period archaeological deposits within the archaeological APE:

- Sanborn Company Fire Insurance maps (Sanborn maps) published in 1888, 1890, 1894, 1906, 1908, 1919, 1920, 1923, 1925, 1930, 1941, and 1949
- USGS maps published in 1896 and 1900 (Pasadena), and 1902 and 1921 (Santa Monica)

Geoarchaeological research was also conducted to assess the potential for encountering buried prehistorical archaeological deposits within the archaeological APE. The research consisted of plotting the APE on the geologic map in order to identify the surface geology of the APE. The primary factor that determines the sensitivity of a particular landform for the presence of buried archaeological resources is the age of the sediments at the location. No human occupation in Los Angeles County has been documented prior to the start of the Holocene Epoch. As such, sediments that were deposited prior to the start of the Holocene Epoch would have no potential to contain intact archaeological deposits. Furthermore, as occupation of the area and population density increased through the Holocene Epoch, the more recent the deposits, the more potential they would have for containing or capping archaeological remains.

3.17.5.2 Methods for Resource Identification

The approach to resource identification differs between archaeological resources and historic built (architectural) resources. While both studies are initiated by a records search and general research to identify known historic resources and past studies, followed by field surveys, the process generally diverges at this point, largely because of limited access to conduct archaeological pedestrian surveys.

Although an archaeological or historic built resource may not be listed in or determined to be eligible for listing in the NRHP, the CRHR, a local register of historic resources (pursuant to Section 5020.1[k] of the Cal. Public Res. Code), or identified in a historic resources survey (meeting the criteria in Section 5024.1[g] of the Cal. Public Res. Code), a lead agency may determine it to be a historical resource as defined in Cal. Public Res. Code Section 5020.1(j) or 5024.1 for the purposes of CEQA, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.

Archaeological Resources Methods

On December 2, 2015, archival research received from the SCCIC identified 20 archaeological resources within 0.125 mile of the archaeological APE. On January 3, 2018, the SCCIC completed an updated records search to update the previous one completed in December 2015, and to identify recorded archaeological sites in portions of the revised APE that were not included in the December 2015 records search area. The records search indicated that there are three archaeological cultural resources within or immediately adjacent to the archaeological APE, consisting of two historic-period features and one multicomponent site. Eighteen archaeological cultural resources are within 0.125 mile of the archaeological APE, all but one of which are historic-period deposits. The record searches included a review of all recorded historic and prehistoric archaeological sites, as well as a review of known cultural resource survey and excavation reports. Additionally, the SCCIC reviewed federal, state, and local inventories (listed above) of cultural resources and provided copies of historic maps.

Archival research included a review of the historical maps to identify areas where previously unrecorded historic-era archaeological resources might be found. Sanborn Fire Insurance Maps published in 1888, 1890, 1894, 1906, 1908, 1919, 1920, 1923, 1925, 1930, 1941, and 1949 were reviewed. The locations of recorded archaeological cultural resources and previous cultural resource studies identified within the 0.125-mile search radius were plotted on an aerial photograph and USGS topographic maps. These aerial figures were then used to determine the types of archaeological deposits within the APE.

All confidential records search data for archaeological resources are attached in appendices of the Burbank to Los Angeles Project Section ASR and ASR: Addendum 1 (Authority and FRA 2017, 2019a) and include:

- Records search request
- Maps of archaeological resources identified within the 0.125-mile search radius
- Maps of previous studies conducted within the 0.125-mile search radius
- Historic maps
- Resource list
- Report list
- Site records (California Department of Parks and Recreation [DPR] forms) for all archaeological resources

Archival research indicated that 159 cultural resource studies have been conducted within 0.125 mile of the APE. Ninety-nine of these studies included portions of the APE, and approximately 61 percent of the APE has been previously surveyed.

To date, no portion of the archaeological APE has been subject to an archaeological pedestrian survey or subsurface investigation for the current undertaking; permissions to enter privately owned parcels and rights-of-way have not been secured. Furthermore, the presence of asphalt, fill, and landscaping throughout the APE precludes inspection of the native ground surface at this time. Stipulation VI.E of the PA provides for phased identification in situations where identification of historic properties cannot be completed: for instance, when private property owners deny permission to enter. In such cases, the development and implementation of a post-review identification and evaluation effort will be stipulated in an MOA to ensure that the historic properties identification effort is completed once the properties become accessible and prior to construction. Field inventory not completed prior to the Record of Decision would follow the requirements in the MOA and be completed when access has been granted and/or the parcels have been acquired.

Historic Built Resources Methods

All surveys were conducted by architectural historians or historians meeting the professional qualification standards as required in Stipulation III of the PA and the Secretary of the Interior's Professional Qualification Standards (48 FR 44738-44739) (Appendix A to 36 CFR 61). As with the records search results discussed above, the locations of previously surveyed historic architectural resources were georeferenced using GIS to identify parcels and known resources within the built resources APE. Qualified Investigators also collected additional information about built environment and historic architectural resources from the following sources:

- *Bakersfield to Los Angeles Region Cultural Resources Technical Evaluation* by Applied Earthworks, Inc. (January 2004)
- *LAUS to SR 134 Baseline Conditions Report and Potential Impact and Mitigation Table for Cultural Resources* by Hatch Mott MacDonald, URS, & Arup Joint Venture (November 2008)
- *Burbank-Glendale-Los Angeles Rail Transit Project Draft Environmental Impact Report*, prepared for the Los Angeles County Transportation Commission by Gruen Associates (1992)
- *Central City North Community Plan Area Historic Resources Survey Report*, prepared for the City of Los Angeles by Historic Resources Group (May 2016)
- *Citywide Historic Context Report*, prepared for the City of Burbank by Galvin Preservation Associates (2009)
- *Cornfield Arroyo Seco Specific Plan Area Historic Resources Survey Report*, prepared for the City of Los Angeles by LSA (June 3, 2011)
- *Link Union Station (Link US) Draft Historical Resources Evaluation Report*, prepared for the Los Angeles County Metropolitan Transportation Authority (Metro) by HDR in association with ICF International (September 2016)
- *Northeast Los Angeles River Revitalization Area Historic Resources Survey Report*, prepared for the City of Los Angeles Community Redevelopment Agency by Historic Resources Group and Galvin Preservation Associates (June 2012)
- *San Fernando Road Corridor Redevelopment Project Area Historic Resources Survey Report*, prepared for the City of Glendale by Harland Bartholomew & Associates (1996)
- *Silver Lake-Echo Park-Elysian Valley Community Plan Area Historic Resources Survey Report*, prepared for the City of Los Angeles by Galvin Preservation Associates (May 2014)
- *South Glendale Historic Context Statement*, prepared for the City of Glendale by Historic Resources Group (September 2014)
- *Spanish Colonial and Mexican Era Settlement Historic Context Statement*, prepared for the City of Los Angeles by Daniel Prosser (February 2016)
- *SurveyLA Chinese American Historic Context Statement*, prepared for the City of Los Angeles Office of Historic Resources by Chattel, Inc. (September 2013)
- *SurveyLA Industrial Development Historic Context Statement*, prepared for the City of Los Angeles by LSA Associates, Inc. (2011)

Finally, several previous HSR technical reports and environmental documents were consulted during the literature review for the Burbank to Los Angeles Project Section.

Detailed historic contexts, regional property typologies, and property-specific research were based on a wide range of primary and secondary materials. Research on the historic themes and survey population was conducted in both archival and published records. This included, but was not limited to, the CHRIS research conducted at the SCCIC. Research also included review of Sanborn maps, historic aerials, building permit records, historical periodicals, and city directories.

Once the historic architectural resources APE was defined, fieldwork began with reconnaissance-level surveys conducted during June, July, August, November, and December 2016, and February 2017 to account for all potentially historic built resources within the APE. The reconnaissance survey included known resources to determine if they had been altered subsequent to their original recordation, and identified resources that would likely require evaluation in compliance with the PA. The reconnaissance-level survey identified 383 historic-era resources (i.e., built, or appearing to have been built, in or before 1966) within the APE. Eleven of these properties had been previously listed or determined eligible for listing in the NRHP and the CRHR and received SHPO concurrence. The remaining historic-era resources required study in compliance with the PA.

Once this survey population was established, research efforts were refined to confirm specific resource construction dates and to refine estimated dates. A Qualified Investigator conducted this research through review of survey photographs and field notes to determine if properties were exempt from further evaluation per Attachment D of the HSR PA. All properties that were not exempt were then further researched using Sanborn maps, historic aerials, and building permit records. This research refined the survey population to those resources built in or before 1966.

All properties containing buildings, structures, objects, districts, or linear features that were known to be built in or before 1966 (i.e., 50 years of age or older at the time of the survey, per the PA) and properties of unknown age were surveyed in accordance with PA Stipulation VI.B and PA Attachments C and D. Forty-four properties had demonstrable potential for historic significance and were fully evaluated for eligibility for the NRHP and the CRHR on DPR 523 forms.

Preparation of the DPR 523 forms also involved conducting additional property-specific research, including historical periodicals and city directories. Previously recorded resources that did not have SHPO concurrence on the prior determination of eligibility were documented on DPR 523L Update Forms (or on DPR 523A and 523B Forms if such documentation had not been previously prepared). If the Authority did not agree with the previous determination of eligibility, then a change of status code was recommended. When previously recorded resources did have SHPO concurrence, the status code was not changed and an update form was only prepared if necessary to clarify the resource boundaries and character-defining features, changes to the resource, or, in the case of large linear resources, to indicate what portion is within the APE. All remaining properties were recorded using the streamlined documentation format prescribed by the HSR PA. For full details of the survey and resource descriptions, see the Burbank to Los Angeles Project Section HASR (Authority 2019b).

Consideration of the Presence of Traditional Cultural Properties

Both the historic built resources survey and archaeological survey included the consideration of the presence of TCPs. These are properties that can be defined generally as those that are eligible for inclusion in the NRHP under Criteria A, B, C, or D and because of their association with cultural practices or beliefs of a living community that (1) are rooted in that community's history and (2) are important in maintaining the continuing cultural identity of the community. "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Unlike archaeological resources and sacred sites, these resources are not subject to federal and state nondisclosure laws. No TCPs were identified in the historic built resources APE.

Methods for Identifying Resources of Importance to Native Americans and Other Interested Parties

As described in Section 3.17.4.2, the Authority has consulted Native Americans and other interested parties to obtain information regarding cultural resources of importance. Despite this outreach, Native Americans and other interested parties have not notified the Authority regarding the existence of TCPs or other cultural resources that the HSR Build Alternative could affect in this region.

3.17.5.3 *Impact Avoidance and Minimization Features*

As described in Section 2.5.2.10, High-Speed Rail Project Impact Avoidance and Minimization Features, the project would incorporate standardized IAMFs to avoid and minimize impacts, as well as develop some site-specific IAMFs. The Authority would incorporate IAMFs during project design and construction and, as such, the analysis of impacts of this project factors in all applicable IAMFs. Appendix 2-B provides a detailed description of IAMFs included in the design of this project. Based on its understanding of the potential construction and operations impacts on historic architectural and archaeological resources, and its experience with HSR construction in the Central Valley, the Authority designed the following IAMFs applicable to cultural resources:

- CUL-IAMF#1: Geospatial Data Layer and Archaeological Sensitivity Map—Requires preparation of a geospatial layer identifying the locations of all known archaeological resources and built historic resources that require avoidance or protection, and areas of archaeological sensitivity that require monitoring.
- CUL-IAMF#2: WEAP Training Session—Requires construction personnel to attend a worker environmental awareness program (WEAP) training session to be able to recognize potential cultural resources and to follow the appropriate procedures should a discovery be made during construction.
- CUL-IAMF#3: Pre-Construction Cultural Resource Surveys—Requires completion of archaeological surveys prior to any ground-disturbing activities.
- CUL-IAMF#4: Relocation of Project Features when Possible—Allows for the relocation of laydown sites if archaeological sites are discovered during survey.
- CUL-IAMF#5: Archaeological Monitoring Plan and Implementation—Requires the preparation of an archaeological monitoring plan prior to construction.
- CUL-IAMF#6: Pre-Construction Conditions Assessment, Plan for Protection of Historic Built Resources, and Repair of Inadvertent Damage—Involves conducting a pre-construction conditions assessment and preparing a plan for protection of historic architectural resources prior to construction and repair of inadvertent damage.
- CUL-IAMF#7: Built Environment Monitoring Plan—Requires preparation of a built environment monitoring plan prior to construction of any ground-disturbing activities within 1,000 feet of a historic property or resource.
- CUL-IAMF#8: Implement Protection and/or Stabilization Measures—Requires implementation of the plans described in the Plan for Protection of Historic Resources and Repair of Inadvertent Damage and in the Built Environment Treatment Plan.

3.17.5.4 *Methods for NEPA and CEQA Impact Analysis*

This section describes the sources and methods the Authority used to analyze potential impacts from implementing the HSR Build Alternative on cultural resources. These methods apply to both NEPA and CEQA unless otherwise indicated. Refer to Section 3.1.3.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating impacts under NEPA and CEQA. Laws, regulations, and orders (see Section 3.17.2, Laws, Regulations, and Orders) that regulate cultural resources were also considered in the evaluation of impacts on cultural resources.

This analysis considers both direct and indirect impacts of the HSR Build Alternative on cultural resources, as well as impacts both from construction and operation of the HSR system. Additional supporting information is provided in Section 4.1, Methodology in the FOE (Authority 2019).

As stated earlier, the Advisory Council on Historic Preservation advises federal agencies to coordinate compliance with Section 106 and the procedures in the regulations implementing Section 106, with steps taken to meet the requirements of NEPA. Consequently, the NRHP criteria for adverse effect, no adverse effect, or no effect to historic properties (36 C.F.R. 800.5) were used to evaluate effects on historic properties within the project's APE. An "adverse effect is found when

an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" [36 C.F.R. 800.5(a)(1)]. The term "directly" refers to the causality or causation of the effect, and not the physicality or physical nature of the effect. Direct effects result from an undertaking at the same time and place with no intervening cause. Direct effects may not only be physical in nature and may also include visual, atmospheric, or audible intrusions. Indirect effects are those caused by an undertaking that are further removed in distance but are still reasonably foreseeable.

Properties that are listed on the NRHP or found eligible for the NRHP are listed on the CRHR and considered historical resources for the purposes of CEQA. The findings were documented in an FOE report; impacts on CEQA-only historical resources were also analyzed and presented in the FOE (Authority 2019).

In considering whether an action may "significantly affect the quality of the human environment" under NEPA, an agency must consider, among other things, the unique characteristics of the geographic area. Such considerations include proximity of the project to historic or cultural resources (40 C.F.R. 1508.27[3]) and the degree to which the action may adversely affect districts, sites, highways, buildings, structures, or objects listed or eligible for listing in the NRHP, and if the project may cause loss or destruction of significant scientific, cultural, or historical resources (40 C.F.R. 1508.27[8]).

Pursuant to NEPA regulations (40 C.F.R. 1500–1508), project effects are evaluated based on the criteria of context and intensity. "Context" is defined as the affected environment in which a proposed project occurs. "Intensity" refers to the severity of the effect, which is examined in terms of the type, quality, and sensitivity of the resource involved; the location and extent of the effect; duration of the effect (short- or long-term); and other considerations of context. Beneficial effects are also considered. When no measurable effect exists, no impact is found to occur. For the purposes of NEPA compliance, the same methods used to identify and evaluate historic properties are applied to aspects of the cultural environment that are not considered NRHP-eligible properties. In compliance with NEPA, evidence or information that suggests both the existence of and impacts to these resources are incorporated into the following analysis.

Cultural resource impact assessment findings presented below are consistent with the NHPA criteria for adverse effect, no adverse effect, or no effect to historic properties (36 C.F.R. 800.5). Under these regulations, a project has an effect on a historic property when the project may alter, directly or indirectly, the characteristics of the property that may qualify the property for inclusion in the NRHP (36 C.F.R. 800.5[a]). An effect is considered adverse when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration is given to all qualifying characteristics of a historic property during the effects analysis, including those that may have been identified subsequent to the original evaluation of the property's NRHP eligibility. Adverse effects may include reasonably foreseeable effects caused by the project that may occur later in time, be farther removed in distance, or be cumulative.

Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 C.F.R. 68) and applicable guidelines
- Removal of the property from its historic location
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features

- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to a Native American tribe or Native Hawaiian organization
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

3.17.5.5 Method for Determining Significance under CEQA

CEQA requires that an EIR identify the significant environmental impacts of a project (CEQA Guidelines § 15126). One of the primary differences between NEPA and CEQA is that CEQA requires a significance determination for each impact using a threshold-based analysis (see 3.1.3.4, Methods for Evaluating Impacts, for further information) or otherwise determined to be a historical resource for the purposes of CEQA. By contrast, under NEPA, significance is used to determine whether an EIS will be required; NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to “significantly affect the quality of the human environment.” Accordingly, Section 3.17.10, CEQA Significance Conclusions, summarizes the significance of the environmental impacts on cultural resources for the HSR Build Alternative. Based on the CEQA Guidelines, the project would result in a significant impact on cultural resources if it would result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
- Disturb any human remains, including those interred outside of formal cemeteries

The CEQA Guidelines use the following definitions to analyze impacts on historical or archaeological resources:

- A substantial adverse change in the significance of a historical resource means 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 (Section 15064.5[b][1]).
- The significance of a historical resource would be materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that convey its historical significance or justify its inclusion in, or eligibility for, the NRHP, the CRHR, or local registers (Section 15064.5[b][2][A–C]).
- A substantial adverse change in the significance of a tribal cultural resource, defined in Cal. Public Res. Code Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Cal. Public Res. Code Section 5020.1(k); or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Cal. Public Res. Code Section 5024.1.

The NRHP eligibility criteria (36 C.F.R. Part 60.4) were used to evaluate the historical significance of resources within the project APE, as described earlier in this chapter, for purposes of CEQA compliance. Properties that are listed on local agency registers may be considered historical resources for the purposes of CEQA (Cal. Public Res. Code §21084.1) even if they are not found to be eligible for the NRHP. The CRHR criteria of eligibility are based on the NRHP criteria. Once the lead state agency determines a property to be eligible for the NRHP and/or the CRHR, the potential for the project to affect the property must be analyzed.

3.17.6 Affected Environment

This section describes the affected environment for cultural resources in the Burbank to Los Angeles Project Section archaeological and historic built resources APEs. This information provides the context for the environmental analysis and evaluation of impacts.

In accordance with PA Attachment C, HSR Program Documentation and Format Guidelines, the methodology for identification of historic properties includes the development of historical themes and contexts. Such contexts characterize the historical environment of the project APE and provide the baseline against which archaeological and historic built resources are evaluated for historic significance and integrity. The following historical contexts and resource typologies are summaries of those included in the Section 106 technical documents. The NRHP eligibility criteria (36 C.F.R. 60.4) were used to evaluate the historical significance of resources within the project APE, as described in earlier, for purposes of NEPA and CEQA compliance.

The Burbank to Los Angeles Project Section traverses three Los Angeles County municipalities, including (from north to south) the cities of Burbank, Glendale, and Los Angeles. Generally, both the archaeological and historic built resources APEs are urban in nature and are characterized primarily by industrial development along the entire length of the Burbank to Los Angeles Project Section, with some areas of commercial and residential development interspersed. There are two prominent linear features that roughly parallel the railroad right-of-way in the Burbank to Los Angeles Project Section: the Los Angeles River and San Fernando Road. The HSR alignment is generally east of the river in the northern part of the Burbank to Los Angeles Project Section, until it crosses the river just south of Figueroa Street, between the Golden State Freeway (Interstate 5) and Arroyo Seco Parkway (State Route 110). After that point, the HSR alignment runs west of the river. Figueroa Street also marks the general location at which San Fernando Road, which runs parallel to and east of the alignment, becomes Avenue 19.

3.17.6.1 Overview of Archaeological Resources

Prehistoric Archaeological Resources

Prehistoric archaeological resources in California are places where native North Americans lived or carried out activities during the prehistoric period before 1769 A.D. Prehistoric sites contain artifacts and subsistence remains and may contain human burials. Artifacts are objects made by people and include tools (e.g., projectile points, scrapers, and grinding implements), waste products from making flaked stone tools (debitage), and nonutilitarian artifacts (beads, ornaments, ceremonial items, and rock art). Subsistence remains include the inedible portions of foods, such as animal bone and shell, and edible parts that were lost and not consumed, such as charred seeds.

Prehistoric Context

Generally, researchers have divided Southern California prehistory into a four-stage chronology describing changing artifact assemblages and evolving ecological adaptations. The principal chronology divides the area prehistory by major cultural changes within general prehistoric time periods for Southern California: the Early Period, the Millingstone Period, the Intermediate Period, and the Late Prehistoric Period. These periods are discussed below.

The Early Period covers the period between approximately 10,000 and approximately 5,500 B.C. Artifacts and cultural activities from this period represent a predominantly hunting culture (Wallace 1955). Although Early Period sites in Southern California are rare, some have been documented on the shorelines of ancient lakes and marshes. In coastal areas, Early Period sites are located along stream channels or near estuaries. An array of specialized cobble, core, flake,

What are Prehistoric and Historic Archaeological Resources?

Prehistoric archaeological resources are the remaining physical evidence of human activity that occurred prior to 1769 A.D., linked to early Native American occupation in California. *Historic archaeological resources* are the remaining evidence of human activities that were carried out during the historic period, generally defined as beginning with European contact in the mid-18th century and ending approximately 50 years ago.

and blade implements also characterize Early Period sites, as do the atlatl and dart. In certain areas, the presence of extremely large, often fluted bifaces mark the Early Period (Moratto 1984:81).

The Early Period is followed in time by the Millingstone Period. Sites from the Millingstone Period (post-5500 B.C.) typically contain groundstone artifacts such as manos, metates, and cogged stones, as well as soapstone objects. Some researchers suggest Millingstone Period cultures were generally hunter-gatherers who spent much time collecting and processing plants. Subsistence strategies included intensive hunting of small and large land mammals, sea mammals, and birds, as well as near-shore fishing and shellfish collecting. Elsewhere, small mammals were hunted and seeds were collected, as documented by the many millingstones found at Millingstone Period sites throughout Southern California (Drover et al. 1983).

The Intermediate Period generally follows the Millingstone Period but extends across a large period of time. By 3000 B.C., coastal populations began greater reliance on marine resources. The remains of near-shore and deep-sea fish appear more often as refuse in middens. The use of the mortar and pestle marks Intermediate Period sites, and there is a notable increase of the mortar and pestle in coastal sites during this period. Additional artifacts found predominantly within the Intermediate Period include discoidals and crescentics (crescentically shaped flaked-stone artifacts) (Wallace 1955).

The Late Prehistoric Period begins approximately A.D. 500 (Bean and Smith 1978). During this period, artifact changes and new cultural practices occur. Smaller projectile points, representing bow-and-arrow hunting, appear in Late Period sites. This period is also marked by steatite effigies and by cremation as an interment practice. These artifacts and practices have been linked to a proposed Shoshonean (Takic) immigration from the Great Basin that ended at the coast. By A.D. 1000, smoking pipes and ceramic pottery occur, although ceramic smoking pipes may occur somewhat earlier and can overlap with the later portion of the Intermediate Period. Dating of sites to the Late Period also depends on the occurrence of other items, such as Salton Sea (Obsidian Buttes) obsidian (Hall 1988). For more detailed information regarding the relevant regional prehistory, refer to the Burbank to Los Angeles Project Section ASR (Authority and FRA 2019a).

Historic Archaeological Resources

Historic archaeological resources in California are found in places where human activities were carried out during the historic period, generally defined as beginning with European contact in the mid-18th century and ending approximately 50 years ago. Some of these resources may be the result of Native American activities during the historic period, but many are the result of Spanish, Mexican, Asian, African-American, or Anglo-American activities. Most historic archaeological sites are domestic sites (places where houses formerly stood) and tend to contain the types of household goods reflecting the economic standing and ethnic identity of their occupants. Remains of ceramic, metal, and glass containers and dishes are most common, along with remains of the materials used in house construction (i.e., nails, brick, and plate glass). Historic archaeological resources can also be nonresidential, resulting from ranching, farming, mining, manufacturing, transportation, and other commercial and industrial activities. Human burials dating to the historic period may also be considered historic archaeological resources.

Historic Context

This historic context focuses on those historical facts that are most important to understanding the archaeological resources that could be encountered within the Burbank to Los Angeles Project Section archaeological APE, and to present relevant historical trends for the project vicinity. Four major historical trends are discussed below: the Spanish and Mexican periods; passenger and freight railroad development; 20th century development; and river channelization and flood control. For more detailed discussion of all relevant historical trends related to the project vicinity, refer to the Burbank to Los Angeles Project Section ASR (Authority and FRA 2019a).

The Spanish and Mexican periods marked a time when the first Europeans in the region, led by Spanish explorer Gaspar de Portolà in 1769, were sent to establish settlements in the Spanish territory known as Alta California. The Pueblo de Los Angeles was founded within the project

vicinity near the junction of two rivers—the Los Angeles River and Arroyo Seco—in 1781. As the town developed, San Fernando Road (part of the El Camino Real, or “The King’s Highway”) emerged as a crucial transportation route between El Pueblo and the missions, presidios, and ranchos to the north and east. In the early 1800s, Spain began to lose its foothold in Mexico and Alta California due to political unrest, a lack of economic independence, and physical isolation. Eventually Mexico was able to gain and declare its independence in 1821. The period of Mexican rule that followed was somewhat tumultuous as the Spanish missions were secularized and a clear and organized form of government failed to take hold. By the early 1840s, the number of Anglo-American settlers in the area had considerably increased and created pressure for the annexation of Alta California to the United States. California was admitted to the United States as a state in 1850 (Prosser 2016).

The first railroad to be built in Los Angeles was the Southern Pacific Railroad, and it ushered in an era of development related to passenger and freight railroad that lasted from about 1876 to 1939. Around the time of the Civil War, stagecoach lines such as the Butterfield Overland Mail Line and the Wells-Fargo Express Company began providing the first—and only—mail and passenger services between California and more established areas to the east. However, once the railroad line was completed in the 1870s, waves of new settlers began arriving in Southern California. Eventually, four major railroads were operating in Southern California during the late 19th and early 20th centuries, including the Southern Pacific Railroad, Union Pacific Railroad, Santa Fe Railroad, and Los Angeles and Salt Lake Railroad. Each line converged in downtown Los Angeles and had its own passenger stations and tracks. With the necessary transportation and industry in place, Southern California’s population exploded in the beginning of the 20th century (Galvin Preservation Associates, Inc. 2009).

Despite regional population growth during the early 20th century, development in the areas surrounding Burbank, Glendale, and northeastern Los Angeles remained rural for quite some time. Former rancho land continued to be used for ranching or was subdivided into smaller farms and orchards. Urban development would not begin in earnest until the introduction of electric street car service. The presence of the rail lines and San Fernando Road facilitated development of industrial tracts in the early 1900s. As a result, industrial development in the project vicinity flourished during the 1920s. Food processing facilities represent some of the earliest industrial development within the area and eventually became a dominant industry during that era. Commercial and residential development was quick to follow, especially in downtown regions of the city of Los Angeles (Historic Resources Group 2016). During the 1920s, there was a major population increase in Southern California overall. New residents arrived in Los Angeles and its environs, drawn to the area by the emerging film, oil, and aviation industries, as well as the vast quantities of affordable land. The populations of some areas would more than triple in the decade between 1920 and 1930. Interestingly, the idea for LAUS in its present location (800 N Alameda Street, Los Angeles) was first proposed in 1922 as part of a larger Los Angeles Civic Center; however, legal complications delayed construction of the station until 1933 (Lovret 1978).

Historically, the Los Angeles River would swell and flood, often changing course and sweeping increasingly larger debris—mud, rocks, trees, animals, and even dwellings—into its path as it raced down the San Gabriel Mountains. When enough of this debris gathered, it would flood and swamp along the river, halting travel and causing millions of dollars in damage and repair costs to properties along the riverbank. Although major floods had occurred before and several public projects attempted to mitigate flooding, the 1930s saw a series of particularly destructive floods, which prompted local officials to request federal assistance. The city of Los Angeles received assistance from the U.S. Army Corps of Engineers to channelize the Los Angeles River. The undertaking began in 1938 and would not be completed until 1960. In all, 51 miles of the Los Angeles River were channelized, and the channelization remains to the present day. Various flood control channels within the APE played a role in the growth and economic development of the area by allowing for more secure investment in river-adjacent areas. They are all generally associated with this historical pattern of events, but the Los Angeles River Channel in particular has the most direct and distinctive association. Due to the large scale of the devastation caused by prior floods of the main Los Angeles River and the extensive undertaking to complete its

channelization, the Los Angeles River Channel had a commensurately greater impact than the smaller tributaries on the local economy (Los Angeles County Department of Public Works n.d.).

Ethnographic Setting

Ethnographic studies show that the project vicinity was occupied by an Uto-Aztecan-speaking Native American group known as the Gabrielino during the 16th to 19th centuries (Heizer 1978). The term “Gabrielino” is derived from the association of these Indian peoples with the Mission San Gabriel Arcángel and was attributed to the group during the Spanish occupation of the region. Also referred to as the Tongva, their territory comprised much of present-day Los Angeles and Orange Counties, portions of which have been occupied by the Gabrielino ancestors for over 7,000 years. The Gabrielino practiced a hunter-gatherer lifestyle and lived in permanent communities near the convergence of two or more environmental zones or habitats. Commonly chosen sites included areas near rivers, streams, and inland watercourses; sheltered coastal bays and estuaries; and the transition zone delineating prairies and foothills. Important considerations influencing the location of habitation sites included the presence of a stable food supply and some measure of protection from flooding. Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. Gabrielino communities in the interior regions maintained permanent geographical territories or use areas that may have averaged 30 square miles in size. However, it is unclear whether this pattern was similar for coastal settlements, where food resources may have been more plentiful. In addition to these permanent settlements, the Gabrielino occupied temporary campsites that were used on a seasonal basis for hunting, fishing, gathering, and processing of wild plant foods and shellfish (McCawley 1996:25).

Three distinctive settlement and subsistence patterns have been identified for Gabrielino communities. The first pattern occurred in the interior mountains, where primary settlements were located in the lower reaches of canyons. These offered protection against cold weather during the winter. During the spring and summer, individual families traveled to seasonal camps to gather bulbs, seeds, and plant foods. In the fall, they moved to oak groves to gather acorns. A second pattern prevailed on the inland prairies, where each winter, populations divided into family units and migrated to coastal shellfish-gathering camps. The third settlement and subsistence pattern occurred among coastal settlements north of San Pedro during the winter season, when the seas were too rough for fishing. Coastal inhabitants of these communities departed to inland habitations to hunt animals and to gather acorns and other plant foods (Hudson 1971).

Gabrielino culture was characterized by an active and elaborate system of rituals and ceremonies. Rituals included individual rites of passage, village rites, seasonal ceremonies, and participation in the widespread Chinigchinich cult. The cult of the culture hero Chinigchinich was observed and recorded by Franciscan Friar Gerónimo Boscana during his residences at Missions San Juan Capistrano and San Luis Rey (Boscana 1978).

Geomorphology of the Project Vicinity

According to the geologic maps of the area, five geologic units may be encountered within the APE: (1) Artificial Fill; (2) Holocene Alluvial Fan Deposits; (3) Holocene and late Pleistocene Young Alluvial Fan Deposits, Undivided; (4) Old Alluvial Fan Deposits, Undivided; and (5) the late Miocene Puente Formation. Of the 782.8-acre APE, 2.69 acres are in areas mapped as Artificial Fill (Af), 340.82 acres are in areas mapped as Holocene Alluvial Fan Deposits (Qf), and 438.4 acres are in areas mapped as Holocene and late Pleistocene Young Alluvial Fan Deposits, Undivided (Qyf). Old Alluvial Fan Deposits, Undivided and the late Miocene Puente Formation make up the remaining 0.9 acre of the APE.

Artificial fill consists of sediments that have been removed from one location and transported to another location by human activity rather than by natural means. Artificial fill has no potential to contain intact prehistoric archaeological resources. It has a moderate sensitivity for the presence of historic-period resources, because historic features can be within engineered environments. Artificial fill may also cap geologic units that have the potential to contain archaeological deposits of any age.

The Holocene Alluvial Fan Deposits were deposited during the Holocene Epoch (less than 11,700 years ago) and consist of unconsolidated mixtures of boulders, cobbles, gravel, sand, and silt. These Holocene deposits have a high potential for the presence of both prehistoric- and historic-period archaeological resources, as they were deposited during the entire period of potential human activity within the APE. In addition, the records search provided abundant evidence for high sensitivity for buried archaeological resources in the southern portion of the APE within these sediments.

The Holocene and late Pleistocene Young Alluvial Fan Deposits, Undivided, are Holocene to late Pleistocene in age (less than 126,000 years ago) and consist of unconsolidated gravel, sand, and silt with occasional cobbles and boulders near mountain fronts. These deposits have a low potential for the presence of buried prehistoric archaeological resources because they were primarily deposited in the Pleistocene, prior to human occupation of the area. However, the upper portions of these deposits have slightly higher sensitivity for buried prehistoric archaeological resources, because they would be the likeliest to have been deposited during the Holocene.

The Old Alluvial Fan Deposits, Undivided, are late to middle Pleistocene in age (11,700 to 781,000 years ago) and consist of unconsolidated silt, sand, and gravel. These deposits are mapped at the easternmost end of the proposed bridge that extends approximately from E Cesar E. Chavez Avenue to north of N Mission Road in the city of Los Angeles. They have no potential for the presence of prehistoric or historic archaeological resources.

The Puente Formation in the Elysian Park Hills area has a maximum thickness of 8,500 feet and consists of marine siltstone, sandstone, and shale deposited during the late Miocene to early Pliocene (3.6 to 11.62 million years ago). Based on the lithology, depositional structures, and faunal comparisons, the rocks of the Puente Formation in this area are inferred to have been deposited as part of a submarine fan in water several thousand feet deep. The Puente Formation has no potential for the presence of buried prehistoric or archaeological resources. Additionally, neither the distance to water nor excessive slopes are factors that would limit the sensitivity for subsurface archaeological sites to be present in any portion of the APE. For more detailed information regarding geomorphology, refer to the Burbank to Los Angeles Project Section ASR (Authority and FRA 2017).

Description of Known Archaeological Sites

Based on the records search, 21 previously recorded archaeological sites are within the search radius, which included a radius of 0.125 mile from the APE. Of these previously recorded sites, three are within or immediately adjacent to the archaeological APE (Table 3.17-8). One of these sites was previously evaluated for NRHP and CRHR eligibility and determined eligible, although there has been no SHPO concurrence with this evaluation. The remaining two sites have not been evaluated for NRHP or CRHR eligibility.

As stated previously, no portion of the archaeological APE has been subject to an archaeological pedestrian survey or subsurface investigation for the current undertaking because permissions to enter privately owned parcels and rights-of-way have not been secured. Furthermore, the presence of asphalt, fill, and landscaping throughout the APE precludes inspection of the native ground surface at this time. All of the sites identified within the search radius and the APE were previously identified as part of other cultural studies.

Table 3.17-8 lists archaeological resources identified within the APE. Known archaeological properties within the APE that could not be evaluated formally are presumed to be potentially eligible for the NRHP, in accordance with Section IV.C.1 and Attachment E of the PA. In order to protect the archaeological resources, they are not presented on figures in this EIR/EIS. The ASR (Authority and FRA 2017) includes a discussion of archaeological resources within the immediate vicinity of the APE; however, the following discussion and subsequent analyses are limited to the three archaeological resources that are within or immediately adjacent to the current APE for the Burbank to Los Angeles Project Section.

Table 3.17-8 Previously Identified Archaeological Resources within and Immediately Adjacent to the Area of Potential Effects

Primary Number	Trinomial or Other ID	Resource Name	Period	Description	NRHP/CRHR Eligibility
P-19-001575	CA-LAN-001575/H	MR-1	Prehistoric/Historic	Multicomponent site; LAUS Passenger Terminal, a Native American cemetery, and a historic Chinatown working-class neighborhood	<ul style="list-style-type: none"> Eligible for the NRHP and the CRHR
P-19-187085	CHL 963	The Mojave Road	Historic	Unpaved historic road, likely no longer extant ¹	<ul style="list-style-type: none"> Unevaluated for NRHP eligibility; assumed eligible California Historical Landmark; listed on the CRHR
P-19-101229	–	IF01	Historic	Vestige of a small circular brick wall feature	<ul style="list-style-type: none"> Unevaluated; assumed eligible for listing on the NRHP and the CRHR²

Source: California High-Speed Rail Authority and Federal Railroad Administration, 2019a
 Locations of the resources are confidential. This table may be updated upon receipt of information from the Palmdale to Burbank Project Section.
¹ Because the Mojave Road (P-19-187085) is likely no longer extant, this resource is not carried through in the analysis.
² Surveys have not been conducted to date because property access has not yet been secured. Therefore, for purposes of this analysis, these resources are assumed eligible for listing.
 APE = area of potential effects LAUS = Los Angeles Union Station
 CRHR = California Register of Historical Resources NRHP = National Register of Historic Places

P-19-001575/CA-LAN-1575/H

This resource is a multicomponent site that consists of the LAUS Passenger Terminal, a Native American cemetery, and the location of a circa 1860–1930s Chinatown working-class neighborhood and red-light district.

The archaeological component was originally recorded after it was discovered during construction monitoring for the Metro Rail Subway. Substantial deposits of Chinese artifacts, architectural remains, and other cultural features attributed to circa 1860–1930s Chinatown were documented. One historic burial was recovered.

In 1996, archaeologists conducted mechanical investigations and construction monitoring for the Metropolitan Water District of Southern California’s new Headquarters Building (Authority and FRA 2017). These investigations documented hundreds of historic-period features, including privies, wells, structural foundations, a three-burner wok stove, remnants of a *zanja* (or irrigation channel), the foundations of Mathew Keller’s sherry house, and numerous brothels and Chinese cribs. In July 1996, a prehistoric Native American cemetery was discovered during monitoring. The cemetery included 14 primary interments, 5 secondary deposition cremation burials, 2 scatters of fragmentary human bone, a historic pit feature, and a historic dog burial. Abundant prehistoric artifacts were also recovered from the prehistoric deposit (Authority and FRA 2017).

The site is mapped within the horizontal APE but is below the vertical APE, because the only HSR Build Alternative-related construction activities proposed at this location are for raising the train platforms and adding OCS infrastructure at LAUS.

The archaeological portion of the site has been evaluated as eligible for the NRHP and the CRHR. As part of the Link Union Station (Link US) project at LAUS, the FRA has submitted a formal evaluation of the NRHP and CRHR eligibility of the site to the California SHPO, and SHPO concurred with the findings on September 27, 2018.

P-19-187085/CHL963

This resource is the unpaved Mojave Road, which was significant in early California history as a Native American trail, a government supply and mail route, a freight and emigrant wagon route, and a recreational trail. This resource has not been evaluated for the NRHP, but as a CHL

(No. 963), it is listed on the CRHR. However, for purposes of this analysis, this resource is assumed eligible for listing on the NRHP. Because this resource is listed on the CRHR, even if it was found ineligible for the NRHP, it would be a CEQA-only property unless the Authority finds that it is not extant and, therefore, the preponderance of evidence indicates that it is not a historical resource. Based on historical maps, the resource is plotted crossing the APE at LAUS (Authority and FRA 2017). Modern development has obliterated any evidence of the dirt trail in the densely urbanized APE. No evidence of the trail has been discovered during any of the numerous archaeological investigations that have been conducted in the vicinity of LAUS where historical maps show road crossing the archaeological APE. Therefore, this site is assumed to have been destroyed within the archaeological APE.

P-19-101229

This resource is the vestige of a small, circular brick wall feature, possibly a cistern or planter, that is partially buried and likely fragmentary. A similar feature (P-19-101230) is approximately 200 feet south on the same lot. The resource has not been evaluated for the NRHP. The resource is plotted at the eastern margin of the archaeological APE. Its current condition and physical extent are not known. Since permission to access private property has not been secured at this time, and because field surveys are necessary to determine the physical extent and NRHP and CRHR eligibility of this resource, for the purposes of this analysis, it is assumed that this resource extends into the archaeological APE and is considered eligible for listing on the NRHP and the CRHR.

Anticipated Site Types

Archaeological resources in the archaeological APE could be either prehistoric or historic. Most of the APE occurs in urbanized areas and has been subject to development; therefore, it is anticipated that archaeological resources would have been disturbed by previous development projects. However, in a dense urban area such as Los Angeles, where the entire landscape has been used historically, historic archaeological deposits can be expected to occur anywhere within that landscape in both disturbed and intact contexts. Archaeological resources are generally categorized as sites or isolates based on Attachment D of the Section 106 PA (Authority and FRA 2011). Attachment D includes a list of archaeological resources that are exempt from evaluation, which served as guidance for establishing archaeological resource exemptions, the criteria for what constitutes an “isolate” and a “site,” and the process for the initial evaluation of a given resource (Authority and FRA 2011). An isolate is defined as an isolated historic finding consisting of fewer than three artifacts per 100 square meters (1,076 square feet). A site is defined as a place where humans lived or where human activities were carried out.

3.17.6.2 Overview of Historic Built Resources

Historic Built Resources

Historic properties are elements of the built environment that are listed in or eligible for the NRHP, and historical resources are defined in the CEQA Guidelines, specifically California Code of Regulations Title 14, Section 15064.5. Historic properties are subject to NHPA Section 106 effect and NEPA impact analysis. Historical resources are subject to impact analysis under CEQA.³ These elements reflect important aspects of local, state, or national history. They can be buildings, structures, objects, sites (including landscapes), or districts. Examples of the types of historic properties (per the NHPA) or historical resources (per the CRHR) within the APE include historic structures, buildings, and sites.

What is a historic built resource?

A *historic built resource* is generally 50 years of age or older and can include, but is not limited to, buildings, structures, districts, and objects ranging from single-family residences, stores or factories, schools, and public buildings to town commercial districts, military bases, roads, landscapes, bridges, ranches and agricultural structures, and railroads that are eligible for listing or listed in the National Register of Historic Places or the California Register of Historical Resources.

³ Refer to Section 3.17.1 for definitions of “historic properties” under the NHPA and “historical resources” under CEQA.

Historic Context

As discussed earlier, the Burbank to Los Angeles Project Section traverses three Los Angeles County municipalities, including (from north to south) the cities of Burbank, Glendale, and Los Angeles. Burbank began as a small farming town at its founding in 1887. Following incorporation in 1911, the city quickly grew into a residential and industrial community. During the 1920s, the motion picture and aircraft industries flourished, which led to the creation of residential developments. The city's industries sustained Burbank through the difficult periods of the Great Depression and World War II, and the city experienced its biggest growth during the late 1940s and 1950s.

The southernmost part of Glendale within the APE was originally known as Tropic. The Southern Pacific Railroad's Tropic Station (no longer extant) was established in 1883, and the nearby townships of Tropic and Glendale were established in 1887. Glendale incorporated in 1906, followed by Tropic in 1911, and by 1918, Glendale had annexed Tropic. Glendale thrived and became a bedroom community by the early 20th century as a result of its proximity to Los Angeles. This was initially made possible by the highly accessible public transportation provided by the Pacific Electric Railway, but the increasingly popular automobile also contributed to Glendale's growth. Within the San Fernando Road corridor, development is primarily industrial in nature, with some commercial uses fronting San Fernando Road and residential uses on some intersecting side streets. Industrial development in the corridor began in earnest in the 1920s, aided by the proximity of the Southern Pacific Railroad Depot (400 W Cerritos Avenue; built 1923), the Pacific Electric Railway, San Fernando Road, and the Grand Central Air Terminal (1310 Air Way; built 1928). In the post-war years, conversion of the former airfields to the Grand Central Industrial Park boosted industrial development within the project vicinity.

Within the city of Los Angeles, the APE is primarily in the Northeast Los Angeles and Central City North Community Plan Areas. The APE crosses into several distinct neighborhoods within the city. The Los Angeles neighborhoods adjacent to the APE are briefly described below (in roughly north to south order). For more in-depth discussion of the historic context for built resources, refer to the Burbank to Los Angeles Project Section HASR (Authority 2019b).

The area that became known as Atwater Village was annexed by Los Angeles in 1910, and its earliest subdivision was in 1909. The Pacific Electric Red Car line enabled Atwater Village to take advantage of the 1920s real estate boom, and much of the residential area was subdivided by 1924. Revival-style single-family homes originally built for working-class families are typical for this neighborhood. The area north of Chevy Chase Drive was developed with commercial and industrial uses, especially along the Southern Pacific Railroad tracks and San Fernando Road.

The Glassell Park neighborhood was named after attorney Andrew Glassell, who owned a large estate in the area in the late 1800s, and whose family subdivided and sold portions of his estate after his passing in 1901. Glassell Park was annexed to Los Angeles in 1912 and 1916. Early residential tracts in Glassell Park have gabled or hipped-roof cottages with American Colonial Revival elements, while later tracts have larger Craftsman homes as well as Spanish Colonial Revival- and Mediterranean Revival-styled residences.

Farther south, Cypress Park is primarily a residential area that developed in the early 20th century, comprising various residential tracts that were subdivided as early as 1905. Cypress Park was annexed to Los Angeles in 1912. Like Glassell Park to the north, homes built in the earliest subdivisions are often gabled or hipped-roof cottages with American Colonial Revival elements. Scattered neighborhood-serving commercial development in Cypress Park appeared on both Cypress Avenue and Figueroa Street as both streets hosted streetcar lines.

The community of Elysian Valley takes its name from the adjacent 600-acre Elysian Park that was dedicated by the City of Los Angeles as a public park in 1886. The first residential tracts were subdivided in 1913. In the 1920s, blocks of small homes began to replace the area's small farms, and homes continued to fill in the gridded streets into the 1950s. Elysian Valley areas adjacent to the river are developed, with light industrial and manufacturing uses.

The Lincoln Heights neighborhood was among the first residential suburbs to develop on the periphery of Los Angeles' downtown in the late 19th century. It became the location of industrial and rail-related uses after the construction of the Southern Pacific Railroad along the adjacent Los Angeles River in the 1870s. However, with the construction of Interstate 5 in the 1950s, the community was physically divided, and its important connections with the river and downtown were lost.

The portion of Central City North adjacent to the Burbank to Los Angeles Project Section is generally sited east of Chinatown and El Pueblo (the city's birthplace). It is characterized by industrial and government support uses, such as the Los Angeles State Historic Park, as well as various other municipal and residential uses.

Types of Historic Built Resources

Several historical trends contributed to the types of historic built resources within the project vicinity. As the greater Los Angeles area changed over time, trends in population growth, railroad development, bridge and highway construction, governmental infrastructure and services, and river channelization all played a role in the built resources of the region. Generally, industrial, commercial, and residential developments influenced the types of historic built resources within the project vicinity.

The rail lines and San Fernando Road facilitated development of industrial tracts in the early decades of the 20th century. Trends in industrial development led to the construction of many industrial properties within the project vicinity. Food processing facilities represent some of the earliest industrial development within the area, performing exceedingly well during the 1910s and 1920s. Extant examples of the food processing industry in the project vicinity include Van de Kamp's Holland Dutch Bakery (2930 Fletcher Drive, Los Angeles; built 1931), Lawry's California Center (570 W Avenue 26, Los Angeles; built 1953 and expanded 1979), and San Antonio Winery (737 Lamar Street, Los Angeles; built 1917). However, the peak for most of the industrial development in the region occurred post-World War II. The two most common industrial property types in the project vicinity were the "daylight factory" and the "controlled conditions factory." In this context, the term "factory" refers to an industrial building or small group of industrial buildings organized around a manufacturing process. A factory can include a single workshop, a large plant, or a complex of related buildings. These later-period industrial properties are therefore relatively ubiquitous and not generally considered to have a high likelihood of being individually significant.

Historic development trends within the region led to major building booms in the late 1800s, the 1920s, and the late 1940s after World War II, and large quantities of commercial properties were built during each of these periods. However, many of the earliest commercial buildings were demolished and replaced with new buildings during the subsequent building booms and the later revitalization efforts of the 1960s. As a result, the extant commercial resources within the APE are most frequently from the 1920s, the post-World War II era, and the 1960s. The commercial buildings from each era share many of the same architectural characteristics. These built resources also reflect the most common types of commercial development from these time periods, such as streetcar-related commercial and auto-oriented businesses. Similar to industrial properties, due to the widespread nature of commercial property types in the project vicinity, they are unlikely to be individually significant within the commercial development context.

The earliest residences within the project vicinity were associated with the early ranchos and farms from the mid-19th century. They consisted of sparsely scattered ranch houses, farm houses, barns, and other rural structures. However, very few residential resources from this period remain. Many were demolished to make way for subsequent development, and those that are extant are generally already identified and not within the APE. Residential development intensified in the early 1900s, following the introduction of electric streetcar lines. Access to transit allowed residents to work in downtown Los Angeles or the surrounding industrial areas and live in developing suburbs such as Glendale, Burbank, Lincoln Heights, and Atwater Village. Streetcar routes were used as a selling point in marketing materials for new subdivisions, and thousands of homes were built in large new tracts throughout the region. An overwhelming majority of these homes were Craftsman in style and were often pre-fabricated. By the 1920s, influenced in part by

the film industry and large expositions such as the Panama-California Exposition in San Diego, breezy and exotic styles like Spanish Colonial Revival and Mediterranean Revival became the preferred residential styles in Southern California. The housing standards developed by the Federal Housing Authority in the 1930s would have an enormous and lasting impact on the homes built after World War II. The immensely popular Minimal Traditional style emerged from these standards, which included provisions for spatial arrangement, efficiency, and modern appliances, as well as contemporary construction materials and mass production methods. Large quantities of residential properties were built during each of these periods. As a result, most of the extant residential resources within the APE were built during the 1920s and the immediate post-war era. Residential structures from these periods are very common, and residences from each era share many of the same characteristics, making them unlikely to be individually significant within the residential development context.

Description of Historic Built Resources in the Area of Potential Effects

The surveys conducted in the Burbank to Los Angeles Project Section identified 408 built-environment resources in the APE that were 50 years old or more at the time of the survey conducted in 2016 and were evaluated using the NRHP and CRHR significance criteria, and in compliance with the PA (Authority and FRA 2011), its attachments, and subsequent guidance. The evaluation of these resources can be found in the HASR (Authority and FRA 2019b) as required by the Section 106 PA (Authority and FRA 2011). Of these evaluated architectural resources, 384 were determined to be ineligible for listing in the NRHP and are, therefore, not addressed in the EIR/EIS. Of the remaining resources, 4 were listed, 7 have been previously determined eligible for listing on the NRHP and CRHR, and 13 have been determined to be eligible for the NRHP and CRHR as a result of this study (including 1 resource that is assumed eligible for this project only). Properties that were previously listed or previously determined eligible were field verified to check their current level of historic integrity and document any changes since they were originally recorded. These 24 properties are also considered to be historical resources for the purposes of CEQA.

Additionally, one resource is ineligible for the NRHP but is listed on the CRHR or officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. Unless the preponderance of the evidence demonstrates that a resource is not historically or culturally significant, such resources are considered historic resources for the purpose of CEQA. As such, this single property was also field checked to see if it had been altered subsequent to its designation. This property has retained integrity and is, therefore, considered a historical resource for the purposes of CEQA.

Figure 3.17-1 shows the listed and eligible historic built resources properties and CEQA-only historical resources in relation to the built resources APE. These resources are discussed further below.

National Register of Historic Places Listed and Eligible Properties

There are 11 resources in the APE that were previously identified as eligible for the NRHP. These include four properties that are listed on the NRHP and seven properties that were identified as part of a previous study or survey and for which SHPO concurred on the determination of eligibility. These 11 properties, including previously listed properties and previously determined eligible properties, are summarized in Table 3.17-9. The Map ID numbers in the first column of the table correspond to the property IDs on Figure 3.17-1 and in the resource descriptions below.

Table 3.17-9 Previously Identified Built Resources Listed on or Eligible for the National Register of Historic Places within the Area of Potential Effects

Map ID Number	Resource Name	APN	Address	City	Status Code ¹
Properties Listed on the National Register of Historic Places					
D2-1	Post Office Terminal Annex	5409-015-016	900 N Alameda St	Los Angeles	1S
D2-2	Los Angeles Union Station Passenger Terminal and Grounds	5409-023-941	800 N Alameda St	Los Angeles	1S; 5S1
D2-3	Glendale Southern Pacific Railroad Depot	5640-042-902	400 W Cerritos Ave	Glendale	1S; 5S1
D2-4	Arroyo Seco Parkway Historic District	No Parcel	No Address	Los Angeles	1S
Properties Determined Eligible for the National Register of Historic Places²					
D3-1	William Mead Homes	5409-011-900, 5409-011-901, 5409-011-902, 5409-012-902, 5409-012-903	1300 Cardinal St	Los Angeles	2S2
D3-2	Mission Tower (AT&SF Tower)	5409-012-908	1436 Alhambra Ave	Los Angeles	2S2
D3-3	Bureau of Power and Light General Services Headquarters	5409-013-913	1630 N Main St	Los Angeles	2S2
D3-4	Broadway (Buena Vista) Viaduct (Bridge #53C0545)	No Parcel	No Address	Los Angeles	2S2; 5S1
D3-5	Spring Street Viaduct (Bridge #53C0859)	No Parcel	No Address	Los Angeles	2S2; 5S1
D3-6	Main Street Bridge (Bridge #53C1010)	No Parcel	No Address	Los Angeles	2S2; 5S1
D3-7	Cesar E. Chavez Avenue (Macy Street) Viaduct (Bridge #53C0130)	No Parcel	No Address	Los Angeles	2S2; 5S1

Source: California High-Speed Rail Authority and Federal Railroad Administration, 2019b

¹ California Historical Resources Status Codes: 1S: Individual property listed in NRHP by the Keeper/ Listed on the CRHR; 2S2: Individual property determined eligible for NRHP by a consensus through Section 106 process; 5S1: Individual property that is listed or designated locally.

² These resources did not receive previous SHPO concurrence; an updated DPR 523 form was prepared for the HASR (Appendix D).

APN = Assessor's Parcel Number

AT&SF = Atchison, Topeka and Santa Fe Railway

CRHR = California Register of Historical Resources

DPR = Department of Parks and Recreation

HASR = Historic Architectural Survey Report

NRHP = National Register of Historic Places

SHPO = State Historic Preservation Officer

Properties Listed on the National Register of Historic Places

Post Office Terminal Annex

The U.S. Post Office—Los Angeles Terminal Annex, at 900 N Alameda Street, Los Angeles (Map Reference No. D2-1 [see Figure 3.17-1 for all property locations]), was the central mail processing facility for Los Angeles from 1940 to 1989. Designed by Gilbert Stanley Underwood, the building's architectural style is Mission/Spanish Colonial Revival. This property was listed on the NRHP on January 11, 1985, as part of the U.S. Post Office Thematic Resource nomination (NRHP SID# 85000131). The nomination is not specific but implies it is eligible under Criterion C as an excellent example of Mission/Spanish Colonial Revival-style architecture and the work of a master architect, Gilbert Stanley Underwood. Its implied period of significance is 1938, the year the building was completed. Although its purpose was principally utilitarian, Underwood sought to keep the building's design consistent with that of LAUS, which opened across the street in May 1939. The original building is a three-story structure with two towers and 500,000 square feet of floor space. Character-defining features include two domes near the front of the building; large canales, or rainspouts, along the front and side elevations below the third-floor cornice; concrete buttresses and thick walls with entrances and windows incised into the surface; richly detailed bronze doors at the public entrances; and the cast concrete vaulted ceiling and terrazzo floors in

the public lobby. A fire escape added to the south elevation in the 1970s is not a contributing element of the historic property, nor are the small ancillary structures north of the original building, which are presumably related to its current use as a data center. The boundaries of the historic property are defined in the NRHP nomination as an irregular trapezoid with a 416-foot frontage on Macy Street (now Cesar E. Chavez Avenue) and a 168-foot frontage on Alameda Street (refer to the HASR for further detail). The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Los Angeles Union Station Passenger Terminal and Grounds

The LAUS Passenger Terminal, at 800 N Alameda Street, Los Angeles (Map Reference No. D2-2), was listed on the NRHP on November 13, 1980 (NRHP SID#80000811), at the local level of significance under Criterion C; the period of significance is 1938. The property is also listed as CHL No. 892. LAUS is automatically listed on the CRHR and is a historical resource for the purposes of CEQA. The boundaries are described in the NRHP nomination as an irregular area generally bounded by Alameda Street on the west, the Santa Ana freeway off-ramp on the south, and Macy Street (now Cesar E. Chavez Avenue) at the north, and including the track area east of the station and extending north to Vignes Street. Contributing elements include the tile roof, arcades, stucco wall cladding, clock tower, arched main entrance, decorated beamed ceilings, tile floors, patios, wrought-iron railings, wainscot, platforms, butterfly sheds, railroad tracks, pedestrian subway, a (rebuilt) retaining wall and luminaire lights just south of stub ends, and ramps. Noncontributing elements include the removal of the Pacific Electric freight service yard and the addition to the Railway Express Agency offices. Additionally, the original NRHP nomination boundaries include the terminal tower, the Cesar E. Chavez Avenue (Macy Street) undercrossing, and a car supply/repair shop, all of which have previously been individually evaluated and are considered contributing features of the historic property. It should be noted that the Vignes Street undercrossing (Map Reference No. D1-12) appears to have erroneously been left out of the original NRHP boundary description but is singularly evaluated in this study and identified as an NRHP-eligible contributing resource to the LAUS NRHP listing. LAUS is also City of Los Angeles Historic-Cultural Monument No. 101, but the boundaries of the City's designation exclude the rail platforms and associated features. LAUS was documented in the Historic American Buildings Survey (Survey Number HABS CA 2-258-A). The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Glendale Southern Pacific Railroad Depot

The Glendale Southern Pacific Depot, at 400 W Cerritos Avenue, Glendale (Map Reference No. D2-3), was listed on the NRHP in 1997 under Criterion A for its importance in the context of rail-related transportation and under Criterion C for its Mission/Spanish Colonial Revival-style architecture; the period of significance is 1924–1953, beginning with construction of the depot in 1924 and including the expansion of the outdoor waiting room in 1943 and addition of a district office in 1953. The property boundaries include the depot and related signage and the immediately adjacent trackage area and open spaces. The depot building and related signage (four stucco posts alternately topped by wooden signs reading “Glendale” or iron and glass lanterns) are contributing elements of the historic property. Renovations completed in 1999 altered the trackage area and open spaces surrounding the depot, adding hardscape features such as planters, decorative paving, walls, ramps, steps, lighting fixtures, and signage. These nonoriginal features are not contributing elements of the historic property. Character-defining features of the historic property include the depot's transportation-related use, the Mission/Spanish Colonial Revival style, a plan consisting of interior and exterior “rooms” arranged end-to-end, paralleling the tracks, and asymmetrical massing emphasized by variations in roof height, form, material, and architectural elements. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Arroyo Seco Parkway Historic District

The Arroyo Seco Parkway Historic District is a linear resource that extends from Pasadena to Los Angeles (Map Reference No. D2-4). It was listed on the NRHP in 2011. There are two contributing elements of this district within the APE: the portions of the Figueroa Street Viaduct (known as the Los Angeles River Bridge, Eastbound) (Bridge #53-0042R) (built in 1936) and the

Los Angeles River Bridge, Westbound (Bridge #53-0042L) (built in 1944) that span the Los Angeles River Channel and the parallel railroad rights-of-way on the east and west sides of the Los Angeles River. The district is eligible under Criteria A, B, and C at the state level of significance. The period of significance extends from 1938, when construction of the original 6-mile segment of parkway commenced, to completion of the southerly extension in 1953. Character-defining features of the Los Angeles River Bridge include five continuous reinforced concrete girder spans and three continuous steel plate girder spans; massive square concrete piers and abutments; and concrete railing with closely spaced narrow arches and railing posts with parallel scoring on the outside face. A pedestrian stairway on the north side of San Fernando Road provides access to a walkway that travels along the northern side of the eastbound bridge, up a spiral staircase, and continues along the southern side of the westbound bridge. The pedestrian stairways and walkways are original features; the concrete barrier topped with a chain-link fence that separates the walkways from traffic are later additions. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Previously Determined Eligible Properties for the National Register of Historic Places

William Mead Homes

William Mead Homes, at 1300 Cardinal Street, Los Angeles (Map Reference No. D3-1), was the eighth public housing development built by the Housing Authority of the City of Los Angeles. It was one of many local garden apartments built as a result of the 1937 Housing Act. Completed in 1942 after several years of delays, William Mead Homes was designed by chief architect P.A. Eisen in collaboration with Norman F. Marsh, Herbert Powell, Armand Monaco, A.R. Walker, and David D. Smith. Its landscape was designed by prolific landscape architect Ralph D. Cornell. William Mead Homes contains a combination of two- and three-story Modern garden apartments on a 15-acre property. The buildings are organized into five blocks that largely adhere to the pattern of the surrounding street grid. William Mead Homes was determined eligible for listing on the NRHP at the local level of significance under Criteria A and C on June 3, 2002, by studies conducted under the U.S. Department of Housing and Urban Development Programmatic Agreement for the City of Los Angeles. It was determined to meet Criterion A for its association with the development of public and defense worker housing in Los Angeles during World War II and to meet Criterion C as a Los Angeles public housing development based on the planning and design principles of the Garden City and Modern movements. The period of significance is 1943–1952. The boundaries of the historic property are U-shaped and are generally bounded by Main Street to the north, Leroy Street to the east, the railroad tracks to the south, and Elmyra Street to the west. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Mission Tower (Atchison, Topeka and Santa Fe Railway Tower)

Mission Tower, at 1436 Alhambra Avenue, Los Angeles (Map Reference No. D3-2), was determined eligible on January 15, 2004, as a result of a run-through tracks intensive-level survey at the local level of significance under Criteria A and C. The period of significance is 1938. The boundaries of the historic property are limited to the building footprint. Character-defining features include a third-floor band of recessed metal casement windows, incised lettering that spells “Mission Tower,” a clay tile hipped roof with overhanging eaves, horizontal windows on the primary elevation, multi-light metal-framed windows, the rear elevation, and the smooth-textured stucco. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Bureau of Power and Light General Services Headquarters

The Bureau of Power and Light General Services Headquarters, at 1630 N Main Street (Map Reference No. D3-3), was previously evaluated as a historic district in 1994 as a part of the Federal Emergency Management Agency’s Northridge Earthquake Project Review. The district was determined eligible for the NRHP at the local level of significance under Criterion A for its association with the development and distribution of power in Los Angeles, and under Criterion B for its association with Ezra F. Scattergood, Los Angeles’ chief electrical engineer for 31 years. The boundaries of the historic property coincide with the core of the site, which is the location of

11 contributing buildings that date within the period of significance for the property (1923–1966), retain integrity, and convey their historic associations with the development and distribution of power in Los Angeles under Criterion A/1. With the exception of the four post-war buildings that are not associated with Ezra Scattergood, the remaining seven buildings within the district boundary retain their integrity and convey their historic associations with Ezra Scattergood under Criterion B/2. The character-defining features of the property are its infrastructural use and the 11 contributing buildings with their utilitarian designs, including concrete cladding, industrial steel sash windows, and flat roofs, as well as Classical, Art Deco, and International design motifs. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Broadway (Buena Vista) Viaduct (Bridge #53C0545)

The Broadway (originally Buena Vista) Viaduct carries North Broadway over the Los Angeles River and railroad rights-of-way (Map Reference No. D3-4). It was previously evaluated in 1986 as part of the California Department of Transportation Statewide Historic Bridge Inventory and determined eligible for the NRHP under Criterion C for its significance as the first viaduct in California and as the first open-spandrel, ribbed concrete arch bridge in the state, a design that became standard for long-span concrete bridges. The period of significance is 1910. In 2008, the bridge was designated as Los Angeles Historic-Cultural Monument #907. The character-defining features of the bridge are its relationship with the Los Angeles River, reinforced concrete construction, open spandrels, multiple spans, and Beaux Arts-inspired design details. The bridge is not associated with a legal parcel; therefore, the boundaries of the historic property are limited to the bridge itself. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Spring Street Viaduct (Bridge #53C0859)

The Spring Street Viaduct carries Spring Street over the Los Angeles River and railroad rights-of-way (Map Reference No. D3-5). It was previously evaluated in 1986 as part of the California Department of Transportation Statewide Historic Bridge Inventory and determined eligible for the NRHP under Criteria A and C for its design and association with the bridge-building period in 1920s Los Angeles. The period of significance is 1928. In 2008, the bridge was designated as Los Angeles Historic-Cultural Monument #900. The character-defining features of the bridge are its relationship with the Los Angeles River, reinforced concrete construction, open spandrels, multiple spans, and Beaux Arts-inspired design details. The bridge is not associated with a legal parcel; therefore, the boundaries of the historic property are limited to the bridge itself. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Main Street Bridge (Bridge #53C1010)

The Main Street Bridge carries Main Street over the Los Angeles River and railroad rights-of-way (Map Reference No. D3-6). It was previously evaluated in 1986 as part of the California Department of Transportation Statewide Historic Bridge Inventory and determined eligible for the NRHP under Criterion C for its engineering. The period of significance is 1910. The bridge was a pioneering example of a three-hinge bridge design that originated in Europe and one of the earliest of its kind in the western United States. In 2008, the bridge was designated as Los Angeles Historic-Cultural Monument #901. The character-defining features of the bridge are its relationship with the Los Angeles River, reinforced concrete construction, open spandrels, multiple spans, and Beaux Arts-inspired design details. The bridge is not associated with a legal parcel; therefore, the boundaries of the historic property are limited to the bridge itself. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Cesar E. Chavez Avenue (Macy Street) Viaduct (Bridge #53C0130)

The Cesar E. Chavez Avenue (formerly Macy Street) Viaduct carries Cesar E. Chavez Avenue over the Los Angeles River (Map Reference No. D3-7). It was previously determined eligible for inclusion in the NRHP as part of the California Department of Transportation Statewide Historic Bridge Inventory in 1986 at the local level of significance under Criteria A and C. The period of significance is 1931. The boundaries of a historic property are limited to the bridge itself. Contributing elements

of the reinforced concrete, open-spandrel viaduct include the arch ribs and struts, spandrel beams and columns, piers, abutments, and wingwalls. In addition, the character-defining features of this ornate Spanish Revival-style bridge include the massive porticos at each end of the bridge, characterized by spiral columns with embellished capitals; the articulated cornice; the seashell details and city seal; and the Baroque-style railing and ornamental lights (comprising base, column, arms, and lanterns). Noncontributing elements include the current deck material, the steel jackets on the spandrel columns, and the restrainers that were added at the bents and deck joints as part of a seismic retrofit. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Newly Identified Built Resources

Thirteen new properties were evaluated within the APE that are eligible for listing on the NRHP and the CRHR. These properties are identified in Table 3.17-10.

Table 3.17-10 Newly Identified Built Resources within the Area of Potential Effects Eligible for the National Register of Historic Places

Map ID Number	APN	Resource Name	Address	City	Status Code ¹
D1-1	5409-002-029	Standard Oil Company Facilities	1756 N Spring St	Los Angeles	2S2
D1-2	5409-010-032	Kelite Factory	1250 N Main St	Los Angeles	2S2
D1-3	5410-003-007	R. Schiffmann Medical Company	1734 N Main St	Los Angeles	2S2
D1-4	5410-019-002	Folk Victorian Residence	1805 Darwin Ave	Los Angeles	2S2
D1-5	5410-019-005	Lanza Bros. Market	1801 N Main St	Los Angeles	2S2
D1-6	5445-006-909	Taylor Yard Signal Tower	1559 N San Fernando Rd	Los Angeles	2S2
D1-7	5458-002-012	Valley Maid Creamery	2909 Fletcher Dr	Los Angeles	2S2
D1-8	5593-003-906 (primary); 5627-020-903; 5627-020-908; 5627-020-911; 5627-025-905; 5627-025-907	L.W. Grayson Steam-Electric Generating Station	901 Fairmont Ave	Glendale	2S2
D1-9	5593-010-016	Aero Industries Technical Institute	5245 W San Fernando Rd	Los Angeles	2S2
D1-10	5627-023-900	Municipal Power & Light, City of Glendale	6135 San Fernando Rd	Glendale	2S2
D1-11	5640-019-037	Los Angeles Basket Company	448 W Cypress St	Glendale	2S2
D1-12	No Parcel	Vignes Street Underpass (Bridge #53C1764) (Part of Los Angeles Union Station Passenger Terminal and Grounds)	No Address	Los Angeles	2S2
D1-13	Portions of 5415-003-901, 5447-027-901, and 5410-002-900	Los Angeles River Channel	No Address	Los Angeles	7N ²

Source: California High-Speed Rail Authority and Federal Railroad Administration, 2019b

¹ California Historical Resources Status Codes: 2S2: Individual property determined eligible for the NRHP by a consensus through the Section 106 process/ Listed on the CRHR; 1D Contributor to a district or multiple resource property listed in the NRHP by the Keeper/ Listed in the CRHR. 7N: Needs to be reevaluated.

² The Los Angeles River Channel is assumed eligible for the purposes of this project only.

APN = Assessor's Parcel Number

CRHR = California Register of Historical Resources

NRHP = National Register of Historic Places

Standard Oil Company Facilities

The Standard Oil Company Facilities, at 1756 N Spring Street, Los Angeles (Map Reference No. D1-1), is eligible for the NRHP and the CRHR at the local levels of significance under Criterion A/1 for its important association with the Standard Oil Company of California, as well as under Criterion C/3 for embodying the distinctive characteristics of an oil industry production and repair facility in the City of Los Angeles. The property's period of significance is 1920 to 1960, the years Standard Oil occupied the property. The boundary of the historic property coincides with the legal parcel on which the buildings are located. The office building, machine shop, and paint shop contribute to the historic significance of the property; however, the large L-shaped warehouse at the center of the property was built outside the period of significance in 1985. The warehouse building was not described or evaluated as part of this study, and it does not share the same historic associations with Standard Oil. It does not contribute to the significance of the historic property. The character-defining features of the property are its industrial use and location abutting the railroad tracks. The office building is characterized by its masonry construction, arched openings, distinctive parapet, and position at the front of the property. The machine shop and paint shop are characterized by their smooth stucco cladding, symmetrically organized bays, industrial sash windows, clerestory windows, and sawtooth monitor roofs. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Kelite Factory

The Kelite Factory, at 1250 N Main Street, Los Angeles (Map Reference No. D1-2), is eligible for the NRHP and the CRHR at the local level of significance under Criterion C/3 as an excellent example of an industrial loft with Art Deco-style elements in the City of Los Angeles. The property's period of significance is 1918 to 1930, the years during which Plant No. 1 was built. The historic property's boundaries are limited to the northernmost portion of the parcel, which contains the Plant No. 1 building, and excludes the southern portion, which contains two buildings (Plant Nos. 2 and 3) that do not embody the same distinctive characteristics of a type, method, or period of construction and do not contribute to the significance of the historic property. Plant Nos. 2 and 3 were built after World War II, whereas the most significant examples of this property type were built prior to 1940. The character-defining features of historic Plant No. 1 are its industrial use, proximity to railroad tracks, vertical orientation, symmetrical organization, smooth stucco cladding, raised parapet, Art Deco detailing, large industrial sash windows, and canopied main entrance. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

R. Schiffman Medical Company

The R. Schiffman Medical Company building, at 1734 N Main Street, Los Angeles (Map Reference No. D1-3), is eligible for the NRHP and the CRHR at the local level of significance under Criterion A/1 as a key factory for "Asthmador," a household name brand that had a significant impact on 20th century social history. The property is also eligible under Criterion B/2 for its association with the productive life of Dr. Rudolph Schiffman, an active philanthropist in the Pasadena area as well as the president of multiple companies, who was best known for his work as a physician and his pioneering asthma treatments. The property's period of significance under Criterion A is 1922 to 1960, the period during which it was built for and occupied by the Schiffman Company. Its period of significance under Criterion B is 1922 to 1926, the years during which Dr. Schiffman was associated with the property before his death in 1926. The property is an early 20th century factory with some characteristics of the industrial loft property type, including its extensive industrial sash windows, three-story construction, and smaller footprint. The historic property's boundaries coincide with the legal parcel on which the building is located; however, the separate, circa-1964 building that is on the same parcel but associated with the address 633 Gibbons Street was built outside the period of significance and does not contribute to the historic property. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Folk Victorian Residence

The Folk Victorian residence, at 1805 Darwin Avenue, Los Angeles (Map Reference No. D1-4), is eligible for the NRHP and the CRHR at the local level under Criterion C/3 as a locally significant example of Folk Victorian architecture. The property has a period of significance of 1900, its estimated year of construction. The property embodies the distinctive characteristics of a Folk Victorian residence, including its small scale; pyramidal hipped roof; vertical wood siding; carved wood details, including decorative brackets and trim; and double-hung wood windows. The historic property was moved to its current location in 1928; therefore, the boundaries are limited to the building footprint. The property meets Criteria Consideration B for moved properties, because it retains sufficient physical features to convey its architectural significance. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Lanza Bros. Market

The Lanza Bros. Market, at 1801 N Main Street, Los Angeles (Map Reference No. D1-5), is eligible for the NRHP and the CRHR at the local level under Criterion A/1 as a rare, remaining physical representation of the historic Italian community in the Lincoln Heights area. As a long-standing, Italian-owned business, the Lanza Bros. Market has a direct association with Los Angeles' ethnic history and documents an important part of the city's settlement and development patterns during the early 20th century. The property has a period of significance of 1926 to 1950, the year it was first opened to the point at which Lincoln Heights began developing into a predominantly Latino neighborhood. The character-defining features of the Lanza Bros. Market are its commercial use; location near a residential area; small, one-story scale; flat roof with raised parapet; multiple flush storefronts; and masonry construction. The exterior stair on the primary elevation is a later alteration and a noncontributing feature. The boundaries of the historic property coincide with the legal parcel on which it is located. There are three residences on the same parcel that are associated with the Lanza family, but they have been heavily altered and are no longer able to convey their historic significance. The three residences do not contribute to the historic property. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA. The Lanza Bros. Market was not evaluated as a TCP because it does not have an integral relationship to the traditional cultural practices or beliefs of a living community. The Italian community in the area has largely dispersed, so any relevant relationships to traditional cultural practices between the property and its surrounding community no longer exists.

Taylor Yard Signal Tower

The Taylor Yard Signal Tower, at 1231 N San Fernando Road, Los Angeles (Map Reference No. D1-6), is eligible for the NRHP and the CRHR at the local level under Criterion A/1 for its association with the railroad history and industrial development of Los Angeles. The tower also meets Criteria Consideration B for moved properties, because it is the last surviving property most importantly associated with Taylor Yard following the redevelopment of the site. The property has a period of significance from 1931 to 1949, the year it was constructed to the year Taylor Yard was significantly renovated. The character-defining features of the signal tower are its proximity to the railroad tracks, two-story height, symmetrical organization, smooth stucco cladding, clay tile roof, pilasters, and groups of windows. As the signal tower has been moved from its original location, the boundaries of the historic property are limited to the building itself. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Valley Maid Creamery

Valley Maid Creamery, at 2909 Fletcher Drive, Los Angeles (Map Reference No. D1-7), is eligible for the NRHP and the CRHR at the local level of significance under Criterion C/3 as an excellent example of the Art Deco style as applied to an industrial property. The period of significance for the property is 1931, the year the office building and cold storage buildings were constructed. A warehouse was built on the site in 1960. The character-defining features of the historic property are its rectangular form with flat roofs, symmetrically arranged rectangular window and door openings, concrete cladding, porte-cochères, geometric Art Deco detailing, bas-relief seal with

serified V, multi-light windows, and decorative copper-alloy office building entry door. The boundaries of the historic property coincide with the legal parcel on which the buildings are located. However, the warehouse building on the site was constructed outside the period of significance, does not have the same architectural distinction, and does not contribute to the historic property. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

L.W. Grayson Steam-Electric Generating Station

The L.W. Grayson Steam-Electric Generating Station, within the Glendale Water & Power Utility Operations Center at 901 Fairmont Avenue in Glendale (Map Reference No. D1-8), is eligible for the NRHP and the CRHR at the local level of significance under Criterion A/1 for its association with developmental history of power generation in Glendale. Its period of significance is from 1941, when the power-generating station was built, to 1955, when the adjacent Grand Central Air Terminal was redeveloped as Grand Central Industrial Center. As part of this redevelopment, a large portion of the former airfield was added to the north end of the Operations Center property, and several new buildings and structures were built. The property is a power-generating station with some characteristics of the institutional-infrastructure property type, including its design as a neighborhood landmark that fits into the fabric of the community, in Late Moderne style, with few or no windows on the façade, as well as its general multistory box structure with a flat roof and its prominent signage. The historic property boundary is limited to the L.W. Grayson Steam-Electric Generating Station building itself, as the larger Glendale Water & Power Utility Operations Center campus has undergone numerous alterations over time, including the replacement of steam turbines and the addition of modern buildings and infrastructure, and does not qualify as an NRHP district as a whole. Most alterations to the overall site occurred after 1955, the end date of the period of significance. However, the Grayson building retains integrity individually. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Aero Industries Technical Institute

The former Aero Industries Technical Institute, in the City of Los Angeles (Map Reference No. D1-9), is eligible for the NRHP and the CRHR at the local level under Criterion A/1 for its association with the development of the aviation industry in Los Angeles. The property was a unique facility that provided aviation training to students during a period of wartime preparations and tremendous growth in the industry. The property as a whole, including the primary and secondary office buildings (5245 and 5221 W San Fernando Road, respectively) and machine shop building (5225 W San Fernando Road), is eligible under Criterion A/1. The primary administrative building for the school, associated with the street address of 5221–5245 San Fernando Road, is also eligible under Criterion C/3 as an excellent example of Streamline Moderne architecture. The character-defining features of the property are their use as school and office buildings, and their Streamline Moderne influenced design, as well as a low streamline wall fronting the property and a column with streamline elements at the south end of the property. The primary office building is characterized by its smooth stucco cladding, rounded corners, horizontal ribbons of windows, flat canopies, and emphasis on horizontality and the feeling of movement. The boundaries of the historic property coincide with the legal parcel on which it is located. The Aero Industries Technical Institute campus historically consisted of two additional properties on an adjacent parcel; however, these buildings appear to have been heavily altered and are not able to convey the same historic associations as the subject property. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Municipal Power & Light, City of Glendale

The Municipal Power & Light Building, at 6135 San Fernando Road, Glendale (Map Reference No. D1-10), is eligible for the NRHP and the CRHR at the local level under Criterion C/3 as an excellent example of an Art Deco-style municipal building. The character-defining features of the property are its industrial use; rectangular form with flat roof; symmetrically arranged windows; rectangular door and window openings; decorative bas-relief panels above the windows and doors; decorative metal grilles; horizontal ribbons of windows; and smooth stucco surfaces. The boundary of the historic property coincides with the footprint of the Municipal Power & Light Building. However, the other

features on the parcel have been recently constructed or do not share the same architectural distinction as the subject building, are not eligible under Criterion C/3, and do not contribute to the historic property. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Los Angeles Basket Company

The Los Angeles Basket Company, at 448 W Cypress Street, Glendale (Map Reference No. D1-11), is eligible for the NRHP and the CRHR at the local level under Criterion A/1 for its association with the early industrial history of Glendale and one of the earliest major employers in the Tropic (later Glendale) area. The character-defining features of the building are its proximity to the railroad tracks, rectangular gabled form, utilitarian design, rectangular window and door openings, and metal siding. The boundaries of the historic property coincide with the legal parcel on which it is located. The Los Angeles Basket Company property was at one time much larger and consisted of several buildings; however, these buildings appear to have been demolished, and the buildings that currently surround the subject building do not share the same historic associations under Criterion A/1. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Vignes Street Underpass (Bridge #53C1764) (Part of Los Angeles Union Station Passenger Terminal and Grounds)

The Vignes Street Underpass carries railroad traffic over Vignes Street near LAUS (Map Reference No. D1-12). It is eligible for the NRHP and the CRHR at the local level under Criterion A/1 for its association with the history of transportation and transportation planning in Los Angeles. It is also eligible under Criterion C/3 as an excellent example of a Works Progress Administration public works project. The character-defining features of the undercrossing are its relationship to LAUS and the railroad tracks, reinforced concrete construction, single filled arch span, and window railings on either side of the deck. The bridge is not associated with a legal parcel; therefore, the boundaries of the historic property are limited to the bridge itself. The property is a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

Los Angeles River Channel

The segments recorded as part of this study are only a small percentage of the much larger, 51-mile-long Los Angeles River Channel (Map Reference No. D1-13). As such, it is unlikely that these segments would be able to convey any significance without the context of the larger resource. The Los Angeles River Channel is significant as a district at the local level under Criterion A/1 for its association with flood control in the Los Angeles region and its role in the development of river-adjacent areas in greater Los Angeles. However, assessing the physical integrity of the entire 51-mile channel between Canoga Park and Long Beach to make a determination of the potential district's eligibility is beyond the scope of a reasonable level of effort for this undertaking. Full evaluation of the entire channel is precluded by its large size and the limited potential for effects as a result of the HSR project. Therefore, for the purposes of this project only, the Los Angeles River Channel is presumed to be eligible for listing on the NRHP and the CRHR. The segments within the APE retain integrity and would contribute to the historical significance of the larger resource should it be fully evaluated in the future. The character-defining features of the Los Angeles River Channel are its route, trapezoidal reinforced concrete channels, parapet paved berms, and central trench at the bottom to guide water flow. The boundaries of the property generally correspond with several legal parcels. Within the APE, these Assessor's Parcel Numbers include 5415-003-901, 5447-027-901, and 5410-002-900. For the purpose of this study, the property is assumed to be a historic property for the purposes of compliance with NEPA and Section 106, and a historical resource for the purposes of CEQA.

CEQA-Only Resources

There is one resource within the APE that is a "CEQA-only" property, which is listed on a local register and not eligible for the NRHP. Therefore, this resource is not considered to be a historic property for NEPA and Section 106, but it is considered a historical resource for CEQA. Table 3.17-11 summarizes this CEQA-only resource.

Table 3.17-11 Built Resources Significant under CEQA

Map ID Number	APN	Resource Name	Address	City	Status Code ¹
D4-1	5458-001-904	Van de Kamp's Holland Dutch Bakery (Los Angeles Historic-Cultural Monument #569)	3020 N San Fernando Road	Los Angeles	5S1

Source: California High-Speed Rail Authority and Federal Railroad Administration, 2019b

¹ California Historical Resources Status Codes: 5S1: Individual property that is listed or designated locally.

APN = Assessor's Parcel Number

Van de Kamp's Holland Dutch Bakery (Los Angeles Historic-Cultural Monument #569)

The Van de Kamp's Holland Dutch Bakery building (Map Reference No. D4-1), in the Glassell Park neighborhood of the City of Los Angeles, was built in 1930. The structure was listed in 1992 on a local register as Los Angeles Historic-Cultural Monument #569 for its significance as "the only example of a Dutch Renaissance Revival Industrial building in Los Angeles." The Van de Kamp business enterprise in general was founded in 1915 by Theodore Van de Kamp and his family. At that time, Van de Kamp's consisted of a small potato chip stand in downtown Los Angeles, which subsequently expanded into the baking business. Van de Kamp's reached its peak during the 1930s and 1940s with widespread supermarket distribution. The subject 1930 historical resource represents an expansion of that successful bakery business. The structure was expanded in 1938 when a retail bakery and coffee shop were added; however, these associated buildings are no longer extant. The subject structure was shuttered in the 1990s, around the time it was designated as a Los Angeles Historic-Cultural Monument.

The period of significance for the resource is 1931, when the main bakery building (northwest corner of the parcel) and the smaller receiving department building (southwest corner of the parcel) were built. The historical resource boundary is limited to these two buildings; the remaining buildings on the parcel (a school building and four sheltered parking structures with solar panels) were built in 2010 and are not part of the historical resource. The character-defining features of the historical resource are its two-story industrial building property type, Dutch Renaissance Revival style, smooth stucco exterior with brick-veneered foundation and brick and voussoir accents, steeply pitched cross-gable roofs with crow-stepped parapets and arched wall dormers, clay tile roof with flush eaves, multi-light windows, and blue neon sign that reads, "Van de Kamp's Holland Dutch Bakery." As a result of alterations in 2010 that demolished all but the front part of the bakery buildings, the property does not retain sufficient integrity to convey its historic significance. Therefore, it is eligible for neither the NRHP nor CRHR and is not a historic property for the purposes of compliance with NEPA and Section 106. The property is a historical resource for the purposes of CEQA because it is listed as a local landmark in the City of Los Angeles.

3.17.6.3 Resources of Importance to Native Americans and Other Interested Parties

Coordination and consultation with Native Americans and interested parties is ongoing. No additional resources have been identified by consulting parties to date.

3.17.7 Environmental Consequences

3.17.7.1 Overview

This section evaluates how the No Project Alternative and the HSR Build Alternative could affect cultural resources, including eligible archaeological resources and eligible historic built resources. The impacts of the HSR Build Alternative are described and organized as follows:

• **Construction Impacts**

- Impact CUL #1: Construction Impacts on Known Archaeological Resources
- Impact CUL #2: Construction Impacts on Unknown Archaeological Resources
- Impact CUL #3: Construction Impacts on Historic Built Resources

- **Operations Impacts**

- Impact CUL #4: Operations Impacts on Archaeological Resources
- Impact CUL #5: Operations Impacts on Historic Built Resources

3.17.7.2 No Project Alternative

The No Project Alternative includes many planned projects that would likely be implemented by the year 2040. These planned projects could result in impacts on archaeological, historic, and built resources, and they would occur regardless of the HSR Build Alternative. Chapter 2, Alternatives, of this Draft EIR/EIS, describes the No Project Alternative. Section 3.19, Cumulative Impacts, provides foreseeable future development projects in the Burbank to Los Angeles Project Section that could affect cultural resources. Each project would be required to complete its own individual environmental review and would be responsible for mitigating impacts, if feasible.

3.17.7.3 High-Speed Rail Build Alternative

Construction Impacts

Construction of the HSR Build Alternative would involve demolition of existing structures, clearing, and grubbing; reduction of permeable surface area; handling, storing, hauling, excavating, and placing fill; possible pile driving; and construction of aerial structures, bridges, road modifications, utility upgrades and relocations, HSR electrical systems, and railbeds.

It should be noted that the Metro Link US Project Final EIR (Metro 2019)⁴ and forthcoming EIS discuss impacts to cultural resources resulting from track construction in certain areas. The Authority was a responsible agency under CEQA on the Link US Project Final EIR and is the federal lead agency (pursuant to the NEPA Assignment Memorandum of Understanding) for the forthcoming EIS. Construction of the Link US project would precede the HSR Build Alternative. Therefore, all impacts discussed below analyze the impacts of the HSR Build Alternative after completion of the Link US project.

Impact CUL #1: Construction Impacts on Known Archaeological Resources

Three known archaeological resources (P-19-001575/CA-LAN-1575/H, P-19-101229, and P-19-187085/CHL963) are within or immediately adjacent to the archaeological APE. Site P-19-001575/CA-LAN-1575/H (commonly called the LAUS Passenger Terminal, a Native American cemetery and the location of a circa 1860–1930s Chinatown working-class neighborhood and red-light district) is within the horizontal APE but below the vertical APE. Because no below-ground work would occur at this location, construction activities would not affect these archaeological resources. Site P-19-187085 (the Mojave Road) is assumed to have been previously destroyed; therefore, the HSR Build Alternative would not affect this resource.

Resource P-19-101229 (a vestige of a small circular brick wall feature) is at the eastern edge of the archaeological APE, where the HSR Build Alternative improvements would be confined to the existing railroad right-of-way. The railroad bed and tracks would be realigned and rebuilt to accommodate two new electrified and two new nonelectrified parallel railroad tracks. An improvement to the existing grade-separated railroad bridge over Glendale Boulevard would also be built near this resource. The railroad tracks would be built using conventional railroad construction techniques. A typical construction sequence includes clearing, grubbing, grading, and compacting the railbed; applying crushed rock ballast; laying track; and installing electrical and communications systems. The at-grade track would be laid on an earthen railbed topped with rock ballast approximately 3 feet off the ground; fill and ballast for the railbed would be obtained from permitted borrow sites and quarries. Because field surveys have not been conducted due to lack of access, the exact location of this resource is not known at this time. Therefore, there is a potential that this resource is located within the disturbance area of the HSR Build Alternative

⁴ More information is available at metro.net/projects/link-us

Excavation activities and construction of the new railroad bed and tracks and the railroad crossing could result in the partial or total physical destruction and/or removal of the resource.

The following IAMFs have been incorporated into the HSR Build Alternative to reduce the potential for ground disturbance-related impacts on archaeological sites:

- CUL-IAMF#1: Requires that a geospatial layer of any archaeological sites be added to construction drawings.
- CUL-IAMF#2: Requires construction personnel to attend a WEAP training session to be able to recognize potential cultural resources and to follow the appropriate procedures should a discovery be made during construction.
- CUL-IAMF#3: Requires completion of cultural resource surveys prior to any ground-disturbing activities.
- CUL-IAMF#4: Allows for the relocation of project features if archaeological sites are discovered during surveys.
- CUL-IAMF#5: Requires the preparation of an archaeological monitoring plan.

These IAMFs would help integrate the location of archaeological sites with construction drawings, ensure that construction personnel are informed of the potential for cultural resources and are aware of procedures to follow in the event of a discovery, and allow for archaeological monitors in certain areas. In accordance with these IAMFs, the exact location of P-19-101229 would be determined through field surveys. Construction personnel would receive cultural resources awareness training, and a monitoring plan would be implemented during construction. However, these IAMFs would not completely reduce potential impacts on P-19-101229 because there is a possibility that the resource would be within the disturbance area of the HSR Build Alternative. Therefore, implementation of CUL-MM#1 would be required. CUL-MM#1 requires compliance with the PA and MOA and mitigation of adverse effects on properties identified during phased identification. The details of the specific conditions and treatment measures for P-19-101229, as well as their implementation, would be stipulated in the MOA and described in detail in the ATP. The resource could be recorded and data recovery would commence if necessary to avoid effects. However, even with implementation of CUL-MM#1, the track alignment may not be able to be altered to avoid this archaeological site by the time property access is granted and the exact location of this resource is determined.

CEQA Conclusion

There is the potential that Resource P-19-101229 is within the disturbance area of the HSR Build Alternative. Even with implementation of CUL-IAMF#1, CUL-IAMF#2, CUL-IAMF#3, CUL-IAMF#4, and CUL-IAMF#5, which would require archaeological sites to be added to construction plans, require a worker training sessions to recognize potential cultural resources, require cultural resource surveys prior to construction, allow for the relocation of project features, and require the preparation of an archaeological monitoring plan, the impact under CEQA would be significant because of the potential physical destruction or alteration of the resource. Therefore, CEQA requires mitigation. As specified in Section 3.17.8, CUL-MM#1 would require compliance with the PA and MOA and mitigation of adverse effects on properties identified during phased identification. Because of the nature of the HSR project and the design requirements, an established alignment may not be able to be altered to avoid archaeological site P-19-101229 by the time property access is granted and the exact location of this resource is determined. Construction activities could permanently cause a substantial adverse change in the significance of a known archaeological resource by destruction, damage, alteration, or relocation of the resource. However, implementation of CUL-MM#1 would reduce or eliminate impacts on known archaeological resources. Therefore, this impact would not be a substantial adverse change to a historical resource and is considered less than significant.

Section 106 Finding

Under Section 106, construction of the HSR Build Alternative would have an adverse effect on P-19-101229 but no effect on P-19-001575 and P-19-187085.

Impact CUL #2: Construction Impacts on Unknown Archaeological Resources

Construction of the HSR Build Alternative could potentially affect unknown archaeological resources. The archaeological APE has not been subject to inventory for archaeological resources because of lack of access to the affected properties. Unknown archaeological resources could be encountered during construction activities, including grading, tunneling, drilling, utilities installation, road widening and realignments for construction of grade separations, equipment staging, and travel along access routes to transport materials and personnel to and from construction areas. Construction of the HSR Build Alternative would potentially affect any archaeological properties within the archaeological APE due to their partial or total physical destruction and/or removal by project excavation.

IAMFs that have been incorporated into the HSR Build Alternative would reduce the potential for ground disturbance-related impacts on as-yet-undiscovered archaeological sites to occur before and during construction. The IAMFs are intended to reduce impacts during pre-construction and include:

- CUL-IAMF#1: Requires that a geospatial layer of any archaeological sites be added to construction drawings.
- CUL-IAMF#2: Requires construction personnel to attend a WEAP training session to be able to recognize potential cultural resources and to follow the appropriate procedures should a discovery be made during construction.
- CUL-IAMF#3: Requires completion of archaeological surveys prior to any ground-disturbing activities.
- CUL-IAMF#4: Allows for the relocation of laydown sites if archaeological sites are discovered during surveys.
- CUL-IAMF#5: Requires the preparation of an archaeological monitoring plan.

These IAMFs would help integrate the location of archaeological sites with construction drawings, ensure that construction personnel are informed of the potential for cultural resources and are aware of procedures to follow in the event of a discovery, and allow for archaeological monitors in certain areas. Per these IAMFs, a phased identification (including additional survey, testing, and evaluation of archaeological resources) would be necessary as property access is granted and the project design is refined. These phased efforts would be conducted pursuant to the MOA and ATP, and would be documented in Supplemental ASRs, Extended Phase I Reports, and Archaeological Evaluation Reports. If previously unidentified archaeological historic properties are found during future surveying, testing, or monitoring, effects on these properties would be assessed and addressed.

However, these IAMFs would not completely reduce potential impacts on unknown archaeological resources because there is a possibility that archaeological resource would be within the disturbance area of the HSR Build Alternative and would be affected during construction. Therefore, the following mitigation measures were developed to reduce impacts prior to and during construction:

- CUL-MM#1: Requires compliance with the PA and MOA and mitigation of adverse effects on properties identified during phased identification.
- CUL-MM#2: Requires that work be halted in the event of an archaeological discovery.
- CUL-MM#3: Requires field surveys for archaeological resources once site access is granted. It also requires that the MOA and ATP to address protocols for the identification, evaluation, treatment, and data-recovery mitigation of as-yet-unidentified archaeological resources.

However, even with implementation of these mitigation measures, there is a potential that the track alignment would not be able to be shifted to avoid sites identified during the phased investigations due to the physical constraints of the existing corridor and the densely built environment. While cultural resource inventories would be completed once legal access is

secured, no inventory can ensure that all resources are identified. Because these previously unknown sites may be historic properties, damage to these sites may diminish their integrity.

CEQA Conclusion

Even with implementation of CUL-IAMF#1, CUL-IAMF#2, CUL-IAMF#3, CUL-IAMF#4, and CUL-IAMF#5, which would require archaeological sites to be added to construction plans, require a worker training session to recognize potential cultural resources, require cultural resource surveys prior to construction, allow for the relocation of project features, and require the preparation of an archaeological monitoring plan, the project would have a significant impact under CEQA, because ground-disturbing activities could permanently cause a substantial adverse change in the significance of unknown archaeological resources by destruction, damage, alteration, or relocation. As specified in Section 3.17.8, CUL-MM#1 would require compliance with the PA and MOA and mitigation of adverse effects on properties identified during phased identification; CUL-MM#2 would require work to be halted in the event of an archaeological discovery; and CUL-MM#3 would require field surveys for archaeological resources once site access is granted and require the MOA and ATP to address protocols for the identification, evaluation, treatment, and data-recovery mitigation of as-yet-unidentified archaeological resources. These mitigation measures are generally accepted measures to address impacts on archaeological sites. Implementation of these mitigation measures would reduce the impacts on unknown archaeological resources during project construction. Therefore, the impact would be less than significant.

Section 106 Finding

Under Section 106, the HSR Build Alternative could potentially have an adverse effect because construction in the permanent HSR right-of-way could damage or destroy unknown archaeological resources.

Impact CUL #3: Construction Impacts on Historic Built Resources

The following descriptions summarize the construction effects on the 25 historic built resources identified in the historic built resources APE:

- D1-1 Standard Oil Company Facilities**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause direct physical destruction of, damage to, or alteration of this historic property. The HSR Build Alternative would construct an at-grade HSR alignment within the existing railroad right-of-way that abuts the eastern property line of the legal parcel. The centerline of the nearest electrified track would be approximately 180 feet east of the closest building that contributes to the historic significance of the property, which is a one-story masonry building originally used as an office for the Standard Oil facility. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction. These IAMFs include a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the industrial use of the historic property. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the resource and its vicinity. These structures would be recognizable as new but generally perceived as being similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Construction activities would involve trucks, bulldozers, and other construction equipment, but high-intensity activities, including pile driving, would not take place at this location. Although unreinforced masonry buildings, such as this historic property, are generally more susceptible to vibratory damage than some other building types, the location and intensity of the proposed construction activity is not anticipated to cause damage this resource.

- **D1-2: Kelite Factory**—The HSR Build Alternative would not encroach on the legal parcel or the historic property boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The Metro Link US project would build two tracks and an access-restriction fence within the existing railroad right-of-way that abuts the south property line of the legal parcel. The centerline of the nearest track would be approximately 600 feet south of the historic property boundary, immediately north of extant nonelectrified tracks. The HSR Build Alternative would add OCS to the two tracks previously constructed by the Link US project. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction. These IAMFs include a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, and it would not affect the industrial use of the historic property. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the resource and its vicinity. There are two buildings at the south end of the legal parcel that are not part of the historic property that would likely at least partially obstruct views of the HSR system from within the boundaries of the historic property. The visible portions of the HSR system would be recognizable as new but generally perceived as being similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used to build the OCS, but high-intensity activities, including pile driving, would not take place at this location. Due to the large distance from the construction area and the nature of the proposed construction activity, there is not a potential for vibration damage to the historic property during construction.

- **D1-3: R. Schiffmann Medical Company**—The HSR Build Alternative would not encroach on legal parcel or the historic property boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property, which is on the east bank of the Los Angeles River and abuts Main Street to the north and an extant railroad right-of-way to the west. At-grade HSR electrified tracks would be constructed on the west bank of the river, approximately 430 feet west of the historic property. The existing tracks nearest to the historic property would remain. In addition, a new elevated, grade-separated road crossing would be constructed 177 feet north of the historic property, just north of the existing Main Street Bridge. Street improvements to accommodate the new grade separation are proposed within the public right-of-way on Main Street, including grading and new roadway paving. The curb adjacent to the historic property would be rebuilt in its current location. Project design incorporates IAMFs to prevent accidental damage to historic properties during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect historic property's present adaptive reuse as a multifamily residential building. From the resource and its vicinity, the new HSR access-restriction fence, electrified tracks, and OCS would be visible in the distance, across the Los Angeles River to the west. These structures would be recognizable as new but generally perceived as being similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource. At a closer range, the new elevated grade separation would be visible to the north from the Main Street frontage of the historic property. While the existing Main Street Bridge over the Los Angeles River has at-grade crossings, this is not typical of the other river bridges in the vicinity. The Spring Street Viaduct, for example, is a grade-separated crossing approximately 0.25 mile to the north and is visible from the historic property (refer to the discussion of D3-5: Spring Street Viaduct [Bridge #53C0859] below). The proposed Main Street grade separation would be recognizable as new but generally perceived as being

similar in form and function to the existing bridges nearby that traverse the river and the parallel railroad rights-of-way.

Dump trucks and rollers would be used for the street improvements, pile drivers would be required for the grade separation, and trucks, bulldozers, and other construction equipment would be used to build the HSR guideway. Although pile driving would be required and the historic property is nearby, there is no potential for vibration damage during construction due to the building's type (reinforced concrete).

- D1-4: Folk Victorian Residence**—The HSR Build Alternative would not encroach on the legal parcel or historic property boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The historic property's primary frontage is on Darwin Avenue, one of several streets to be reconfigured because of the proposed elevated grade separation at Main Street. The abutting property to the west of the historic property would be acquired to allow for the realignment of S Avenue 17, and street improvements are proposed within the public rights-of-way on Mozart Street and Darwin Avenue. The level of these streets would be raised slightly (approximately 3 to 5 inches) in order to connect them with the proposed Main Street grade separation. New sidewalk, curb, and gutter would be built along the north, west, and south property lines of the historic property's legal parcel, and access to the historic parcel would be maintained. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the residential use of the historic property. This historic property is located at the edge of a residential neighborhood that extends to the northeast. There are industrial uses southwest of the historic property that are generally taller than the nearby residential uses. The proposed grade separation would be 216 feet southwest of the historic property, buffered by industrial uses in between. From within the boundaries of the historic property, the industrial buildings would partially, if not entirely, obscure view of the elevated structure. The removal of the residence on the abutting property to the west in order to accommodate the realignment of Avenue 17 to the east would bring that right-of-way closer to the historic property. However, the historic property is currently on a through lot with frontages on both Darwin Avenue and Mozart Street. A new frontage on Avenue 17 would incrementally change the immediate setting of the historic resource, but the change would not be as dramatic as, for example, adding a new frontage to a typical interior lot with only one existing frontage. The character-defining features of the Folk Victorian Residence would remain intact, as would the residential character of the block extending east along Darwin Avenue and Mozart Street.

Construction of the Main Street grade separation would take place approximately 200 feet southwest of the historic property, and associated street improvements would take place within the public right-of-way abutting the property to the north, west, and south. Dump trucks and rollers would be used for the street improvements, and pile drivers would be required for the grade separation. Although nonengineered timber buildings, such as this historic property, are generally more susceptible to vibratory damage than some other building types, due to the location and intensity of the proposed construction activity, no damage is anticipated.

- D1-5: Lanza Bros. Market**—The HSR Build Alternative would not encroach on the legal parcel or historic property boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The historic property's primary frontage is on Main Street, one of several streets to be reconfigured because of the proposed elevated grade separation. Avenue 17 and Main Street would be reprofiled and repaved. In front of the historic property, along Main Street, the approximately 12-foot-wide sidewalk would be reduced to a width of approximately 8 to 10 feet. Along Avenue 17, immediately west of the historic property, the street realignment would

result in a triangular-shaped piece of former right-of-way being incorporated into the historic property's legal parcel or remaining as unused land. The abutting property to the north, currently improved with a one-story industrial building, would be acquired to allow the realignment of Avenue 17. The street improvements would not encroach on the historic property's boundaries, nor would they require any construction activities that would cause direct physical destruction of, damage to, or alteration of this historic property. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the commercial use of the historic property. The proposed Main Street grade separation and associated street improvements would be visible from the south and west elevations of the resource. The sidewalk along Main Street, which presently accommodates outdoor seating for the market, would be slightly reduced in width but would still be able to accommodate the outdoor seating function and allow pedestrian access to the building. The materials used to repave the sidewalk and roadway along Main Street and Avenue 17 would be similar to existing conditions, resulting in minimal visual change. When standing in front of the market, looking west along Main Street, there would be a change from a relatively flat, straight roadway to a curved, raised roadway as a result of the new elevated grade separation. This change in the broader setting of the historic property would not affect the physical features of the property's setting that contribute to its historic significance, namely its pedestrian-oriented street frontage and proximity to a residential neighborhood. The residential structures at the rear of the parcel do not contribute to the historic significance of the property; therefore, the visual changes associated with the acquisition of the abutting parcel to the rear (behind these residential buildings) would not affect the historic property.

Construction of the Main Street grade separation would take place approximately 730 feet west of the historic property, and associated street improvements would take place within the public right-of-way abutting the property to the south and west. Dump trucks and rollers would be used for the street improvements, and pile drivers would be required for the grade separation. Although unreinforced masonry buildings, such as this historic property, are generally more susceptible to vibratory damage than some other building types, due to the location and intensity of the proposed construction activity, no damage is anticipated.

- **D1-6: Taylor Yard Signal Tower**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The historic property is near the north end of the Metrolink Central Maintenance Facility, which would be reconfigured to accommodate the HSR Build Alternative while maintaining as many of the existing yard operations as possible. At this location, the two sets of at-grade tracks (nonelectrified mainline and new HSR electrified) would diverge such that the electrified tracks would travel along the west side of the Central Maintenance Facility, approximately 300 feet west of the historic property, and the nonelectrified mainline would travel along the east side of the facility, approximately 170 feet west of the historic property. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity. The historic property is not currently in use, but no new use is proposed. The access-restriction fence, reconfigured Central Maintenance Facility, and nonelectrified mainline track would be visible from the resource and its vicinity. Structures within the Central Maintenance Facility would likely at least partially obscure the view of the electrified tracks and OCS. These proposed features

would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used, but there would be no high-intensity activities, including pile driving at this location. Although construction would take place in the vicinity of the historic property, there is not a potential for vibration damage during construction due to the building's type (engineered concrete) and the nature of the proposed construction activity.

- D1-7: Valley Maid Creamery**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The HSR Build Alternative would shift the extant nonelectrified tracks within the existing railroad right-of-way that abuts the west property line of the legal parcel and construct an at-grade HSR alignment. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the industrial use of the historic property. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the resource and its vicinity. These structures would be recognizable as new but generally perceived as similar in form to the existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Construction of the HSR Build Alternative would take place in the railroad right-of-way abutting the nearest buildings that contribute to the historic significance of the property, which are the two former cold storage buildings. These buildings are one-story, unreinforced masonry construction. Trucks, bulldozers, and other construction equipment would be used, but there would be no high-intensity activities, including pile driving at this location. Although unreinforced masonry buildings, such as this historic property, are generally more susceptible to vibratory damage than some other building types, due to the location and intensity of the proposed construction activity, damage is not anticipated. Please refer to the Burbank to Los Angeles Project Section FOE (Authority 2019) for a description of typical construction vibration levels.

- D1-8: L.W. Grayson Steam-Electric Generating Station**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The HSR Build Alternative would shift the extant nonelectrified tracks within the existing railroad right-of-way that abuts the east property line of the Glendale Water & Power Utility Operations Center and would add an at-grade HSR alignment. The historic property is within the core of the Operation Center site, approximately 150 feet east of the right-of-way. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would it affect the property's municipal infrastructure use. The new HSR access-restriction fence, electrified tracks, and OCS would likely be at least partially obscured from view from the resource due to an extant concrete masonry unit wall that separates the Operations Center from the railroad right-of-way. When viewed from outside the Operations Center in the vicinity of the resource, these structures would be recognizable as new but generally perceived as similar in form to existing

rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used, but there would be no high-intensity activities, including pile driving, at this location. Although construction would take place in the vicinity of the historic property, there is not a potential for vibration damage during construction due to the building's type (engineered concrete) and the nature of the proposed activity

- **D1-9: Aero Industries Technical Institute**—The HSR alignment would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The HSR Build Alternative would shift the extant nonelectrified tracks within the existing railroad right-of-way approximately 60 feet east of the historic property and construct an at-grade HSR alignment. W San Fernando Road abuts the historic property's east parcel line and separates it from the railroad right-of-way. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity. The project would not affect present adaptive reuse of the historic property as a beauty school, church, and industrial. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the resource and its vicinity. These structures would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used, but high-intensity activities, including pile driving, would not take place at this location. Although construction would take place near the historic property, there is not a potential for vibration damage during construction due to the historic property's building types (engineered concrete and masonry) and the nature of the proposed construction activity.

- **D1-10: Municipal Power & Light**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. To accommodate the addition of electrified HSR tracks to the existing railroad right-of-way that abuts the west property line of the legal parcel, the extant nonelectrified tracks would be shifted east. Both sets of tracks would be built on retained fill, up to approximately 30 feet in height. The historic property boundary and west elevation of the subject building is approximately 15 feet east of the railroad right-of-way. Additionally, a new grade separation would be built at Grandview Avenue (an early investment project), approximately 330 feet south of the historic property, where the street level would be lowered up to 3 feet and the tracks would be raised on retained fill. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the property's municipal infrastructure use. The new HSR access-restriction fence, OCS, and retained fill would be visible from the rear and side elevations of the historic building and would appear in the background of the resource when viewed from the primary frontage on San Fernando Road. The access-restriction fence and OCS structures would be recognizable as new but generally perceived as being similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource. The retained fill, which would be up to 30 feet high, at Grandview Avenue would be a more

substantial visual change compared to the extant at-grade railroad right-of-way and crossing. However, the NRHP significance of the historic property is due to its architectural quality, and the character-defining features of the building are unrelated to the setting. The proposed changes in the setting of the historic property would not affect the physical features of the property that contribute to its historic significance.

Trucks, bulldozers, and other construction equipment would be used for construction of the access-restriction fence, tracks, and OCS within the railroad right-of-way. The retained fill and grade separation may require pile-driving. Although construction would take place close to the historic property, there is not a potential for vibration damage during construction due to the building's type (engineered concrete) and because the more intensive pile-driving activity would be farther from the historic property than the lower-intensity construction activities.

- D1-11: Los Angeles Basket Company**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. Within the existing railroad right-of-way that abuts the historic property to the west, the HSR Build Alternative would shift the existing at-grade nonelectrified tracks to the east and construct at-grade electrified HSR tracks. Approximately 300 feet south of the historic property, the existing railroad bridge at Los Feliz Boulevard would be rebuilt to be wider and the roadway would be lowered slightly in elevation. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the industrial use of the historic property. The new HSR access-restriction fence, OCS, and tracks would be visible from the front, west-side, and rear elevations of the historic building and would appear in the background of the resource when viewed from the property's street frontages on Cypress Street and Fernando Court. These structures would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource. The railroad bridge widening at the Los Feliz Boulevard grade separation would be minimally perceptible (if at all) from the historic property due to the distance and angle of view. The slightly lowered roadway beneath the bridge would not be visible from the historic property at all.

Trucks, bulldozers, and other construction equipment would be used within the railroad right-of-way, and pile drivers may be required for the Los Feliz Boulevard grade separation modification. Although nonengineered timber buildings, such as this historic property, are generally more susceptible to vibratory damage than some other building types, the location and intensity of the proposed construction activity is not anticipated to cause damage.

- D1-12: Vignes Street Underpass (Bridge #53C1764)** —The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. As part of the Metro Link US project, the level of the existing tracks on the underpass would be raised, which may require modification or replacement of the historic property. The HSR Build Alternative would make subsequent alterations to the improvements made by the Link US project, adding an OCS to the tracks approximately 12 feet to the east of the historic property. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the historic property's use as a bridge. The new OCS would be visible in front of the bridge when

viewed from the west and in the background of the bridge when viewed from the east. The OCS would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used to build the OCS, but high-intensity activities, including pile driving, would not take place at this location. Although construction would occur close to the historic property, there is not a potential for vibration damage during construction due to the building's type (reinforced concrete) and the nature of the proposed construction activity.

D1-13: Los Angeles River Channel—The HSR Build Alternative would not cause physical destruction of or damage to this historic property, nor would it make alterations of this historic property that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. One new crossing would be built over the channel, including a new vehicular bridge just north of the extant Main Street Viaduct. The existing Main Street Viaduct is individually eligible for the NRHP and the CRHR, and is discussed separately below. However, it is not built as part of the river channelization and is not a potential contributing feature of the assumed-eligible district. The new crossing would require new piers in the Los Angeles River Channel.

Additionally, two existing bridges would be modified: nonelectrified tracks would be added to the existing Mission Tower Bridge and the existing tracks on the Metrolink Downey Bridge would be electrified. These two crossings are not individually eligible for the NRHP or the CRHR. They were built as part of the Southern Pacific Railroad, not as part of the river channelization effort, and are not potential contributing features to the assumed eligible district. Changes to these two crossings would not require the construction of any new piers within the river channel.

Although the construction of new bridge piers in the river channel would physically alter some of the historic property's materials, it would not alter the character-defining features of the historic property. Patches of concrete beneath the piers may be lost, but the channel's route, trapezoidal reinforced concrete channels, parapet paved berms, and central trench would remain intact. Furthermore, the lost patches of concrete would constitute only a very minor fraction of the overall concrete channel's surface and could be repaired with relative ease if the piers were removed in the future, consistent with Rehabilitation Standard No. 10 (36 C.F.R. 68, Section 68.3 [b] [10]). Project design incorporates IAMFs to prevent accidental damage to historic properties during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the historic property's flood control use. The new access-restriction fence, HSR tracks, and OCS would be visible along portions of the east and west banks of the channel, and the reconfigured and new bridges would be visible from within the channel. However, these structures are consistent with the types of transportation infrastructure that have historically surrounded the river channel.

Construction of the HSR Build Alternative would take place within the river channel and in the existing railroad rights-of-way that abut either side of the channel. Trucks, bulldozers, and other construction equipment would be used to build the access-restriction fence, HSR and non-HSR tracks, and OCS in the railroad rights-of-way. Pile driving would be required to build the new bridge piers within the channel. Although high-intensity construction activities would take place on the historic property, there is not a potential for vibration damage during construction due to the historic property's building type (reinforced concrete).

- **D2-1: Post Office Terminal Annex**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would

cause physical destruction of, damage to, or alteration of this historic property. As part of the Metro Link US project, tracks would be constructed in the railroad right-of-way that abuts historic property. This element is addressed in the Metro Link US Final EIR and forthcoming EIS. The HSR Build Alternative would add OCS to the tracks built as part of the Link US project. The nearest of the four proposed HSR tracks would be approximately 70 feet east of the rear elevation of the Terminal Annex. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the present adaptive reuse of the historic property as a data center. The new OCS would be visible from the side and rear elevations of the historic building, but it would not be visible when a viewer stands in front of the primary elevation due to the building's height. The OCS would be recognizable as new but generally perceived as similar in form to the existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used to build the OCS, but high-intensity activities, including pile driving, would not take place at this location. Although construction would take place close to the historic property, there is not a potential for vibration damage during construction due to the building's type (reinforced concrete) and the nature of the proposed construction activity.

- D2-2: Los Angeles Union Station Passenger Terminal and Grounds**—The HSR Build Alternative would not cause physical destruction of or damage to this historic property, nor would it make alterations that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. As part of the Metro Link US project, tracks and two 800-foot platforms (with the possibility of extending to 1,000 feet) would be built within the LAUS campus. These elements are addressed in the Metro Link US Final EIR and forthcoming EIS. The HSR Build Alternative would make subsequent alterations to the improvements made by the Link US project, including platform height increases and installation of OCS. Because the HSR Build Alternative construction would be limited to modifications of the new platforms and tracks built previously as part of the Link US project, which are not original portions of the historic property, the HSR project would not physically alter the original materials or character-defining features of LAUS. Project design incorporates IAMFs to prevent accidental damage to historic properties during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would make subsequent alterations to the improvements made as part of the Link US project, including platform height increases and installation of OCS. The platforms and OCS would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Construction of the HSR Build Alternative would take place on tracks and platforms built as part of the Link US project. Trucks, bulldozers, and other construction equipment would be used to build the OCS on the new tracks and to raise the two new platforms. The construction activity would be limited to portions of the property that were not originally part to this historic resource, and, due to the nature of the proposed construction activities and their distance from most contributing elements of the historic property, there is not a potential for vibration damage during construction. However, the types of construction activity proposed do not have the potential for vibration damage to this reinforced concrete structure.

- **D2-3: Glendale Southern Pacific Railroad Depot**—The HSR Build Alternative would encroach on this historic property boundaries, but it would not require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. Metrolink currently uses the historic property and two existing tracks nearest to the rear elevation of the depot building, but there would be no changes to the depot, which would remain in operation during construction and operation of the HSR Build Alternative. Property to the west would be acquired for additional right-of-way, the existing nonelectrified tracks would be realigned, and an access-restriction fence, two tracks, and an OCS would be built. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would it affect the present railroad depot use. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the side and rear elevations of the historic building and would be visible in the background from the primary elevation on Cerritos Avenue. These structures would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used within the railroad right-of-way, but high-intensity activities, including pile driving, would not take place at this location. Although construction would occur close to the historic property, there is not a potential for vibration damage during construction due to the building's type (reinforced concrete) and the nature of the proposed construction activity.

- **D2-4: Arroyo Seco Parkway Historic District**—The HSR Build Alternative would encroach on this historic district's boundaries and cause physical destruction of or damage to the historic property, or cause alterations that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The HSR Build Alternative may result in a direct adverse effect on the Arroyo Seco Parkway Historic District, and mitigation is proposed. An at-grade HSR alignment would be built within the existing railroad right-of-way that passes beneath the Los Angeles River Bridge on the west bank, and the existing non-HSR alignment that passes beneath the bridge on the east bank would be reconfigured. A new intrusion-protection railing would be built on the historic bridge deck above the HSR alignment to prevent people and objects from entering the right-of-way from the bridge. The Authority proposes a property-specific mitigation measure that would be designed in consultation with the City of Los Angeles and analyzed for potential impacts in a Supplemental FOE. This property-specific mitigation measure would require the Authority to work with consulting parties to design intrusion-protection railing that would minimize this potential direct adverse effect to the maximum extent feasible (CUL-MM#12). The intrusion-protection railings are protective barriers required on highway, roadway, freight, and pedestrian structures that cross over the HSR. Providing a solid barrier on these structures where they cross over the electrified components of the system is critical for the safe operation of the train and the protection of both passengers and rail employees. Solid barriers on these overcrossings would be required to extend to the edge of the rail right-of-way or 30 feet from the centerline of the outermost track, whichever is greater, at a minimum height of 8 feet. In addition, project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1), mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2), a pre-construction conditions assessment and plan for protection and repair (CUL-IAMF#6), and a built-environment monitoring plan (CUL-IAMF#7).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity of setting. The access-restriction fence and OCS structures would be recognizable as new but generally perceived as similar in

form to existing rail infrastructure and supporting rail activities similar to those that already define the physical context of the resource. In addition to carrying the Arroyo Seco Parkway over the Los Angeles River, this bridge was also built to pass over the rail lines that parallel the river banks. As a result, rail lines have always been part of the setting of this historic property, and introduction of this new rail technology within the existing right-of-way would not diminish the integrity of this resource or prevent it from conveying its historic significance as a contributor to the historic district.

Construction of the HSR Build Alternative would take place near the piers of the Los Angeles River Bridge, which is a large, reinforced concrete structure. Trucks, bulldozers, and other construction equipment would be used for construction of the access-restriction fence, tracks, and OCS, but high-intensity uses, including pile driving, would not be required. Although construction would take place near the historic property, there is not a potential for vibration damage during construction due to the historic property's building type (reinforced concrete) and the nature of the proposed construction activity.

- D3-1: William Mead Homes**—The construction of the OCS would take place within this historic property's boundaries. However, the work would be limited to portions of the property that were not originally part of this historic resource. As part of the Metro Link US project, two tracks and a retaining/sound wall would be added to the existing railroad right-of-way that abuts the historic property to the south. The tracks are addressed in the Metro Link US Final EIR and forthcoming EIS . The HSR Build Alternative would add OCS to the two tracks previously built by the Link US project, which would take place approximately 40 feet south of the southernmost building on the historic property. Therefore, the HSR project would not physically alter the original materials or character-defining features of William Mead Homes. Project design incorporates IAMFs to prevent accidental damage to historic properties during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity. The OCS would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used to build the OCS, but high-intensity activities, including pile driving, would not take place at this location. Although construction would occur close to a contributing element of the historic property, there is not a potential for vibration damage during construction due to the building's type (reinforced masonry) and the nature of the proposed construction activity.

- D3-2: Mission Tower**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause direct physical destruction of, damage to, or alteration of this historic property. As part of the Metro Link US project, two at-grade tracks and an access-restriction fence would be built approximately 160 feet north of the historic property, parallel to and north of existing nonelectrified tracks. These elements are addressed in the Metro Link US Final EIR and forthcoming EIS. The HSR Build Alternative would add OCS to the tracks built as part of the Link US project. In addition, the HSR Build Alternative would add a set of nonelectrified tracks approximately 10 feet north of the historic property, parallel to the existing Metrolink tracks that cross the Los Angeles River on the nearby Mission Tower Bridge. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity. The historic property is not currently in use, but no new use is proposed. From the north, east, and west elevations of the

historic property, the proposed nonelectrified tracks (approximately 10 feet north) and OCS (approximately 160 feet north) would be visible. These elements would also appear in the background of the Mission Tower when viewed from the historic property's south elevation. The new nonelectrified tracks and OCS would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource. As a rail signal tower, rail lines and associated infrastructure have always been part of the setting of this historic property.

Trucks, bulldozers, and other construction equipment would be used to build the nonelectrified tracks and OCS approximately 10 and 160 feet north of the historic property, respectively, but higher-intensity activities, including pile driving, would not be necessary. Engineered concrete buildings, such as this historic property, are generally less susceptible to vibratory damage, and the location and intensity of the proposed construction activity is not anticipated to cause damage.

- **D3-3: Bureau of Power and Light General Services Headquarters**—The Bureau of Power and Light General Services Headquarters was previously evaluated as a historic district. The HSR Build Alternative would not encroach on this historic district's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of the historic properties that make up the district. The historic district abuts Main Street to the north and an existing railroad right-of-way to the south. Approximately 200 feet east of the district, the HSR Build Alternative would build a new Main Street grade separation, and associated street improvements would take place within the public right-of-way. Starting from just east of Sotello Street, near the northwest corner of the district, Main Street would be raised in elevation to meet the level of the elevated Main Street grade separation. The Main Street roadway would be reprofiled and repaved, and the existing approximately 12-foot-wide sidewalk would be rebuilt as an approximately 8- to 10-foot-wide sidewalk. A cast-in-place concrete retaining wall would be located at the curb face of the new sidewalk and would range from zero to 30 feet in height above grade. Just south of the district's southern boundary, the Metro Link US project would build two tracks within the existing railroad right-of-way. The Metro Link US Final EIR and forthcoming EIS addresses the effects of these new tracks. The HSR Build Alternative would subsequently add OCS to the two tracks previously built as part of the Link US project, approximately 10 feet south of the historic district. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect the municipal infrastructure use of the historic property. The proposed elevated Main Street grade separation and related street improvements would be most visible from the north, street-facing elevations of the Light Mechanical Shops Building and Heavy Mechanical Shops/Administration Building (Buildings 1 and 16, respectively). The street-facing elevations of Buildings 1 and 16 are not the primary entrance/façade; the front façades are on the north and east, respectively, and are oriented toward the grounds of the General Services Headquarters. For viewers standing on the sidewalk in front of these buildings, the elevated roadway and retaining wall would be immediately visible, and the grade separation would be visible to the north and east. For the remaining buildings in the district, which are behind Buildings 1 and 16, views of these features would be at least partially obscured by other buildings, large structures relating to the facility's power distribution functions, and a concrete masonry unit wall that surrounds most of the legal parcel. Similarly, at the southern boundary of the district, the existing concrete masonry unit wall that separates the General Services Headquarters from the abutting railroad right-of-way would at least partially obstruct views of the proposed OCS from within the historic district. In summary, the external setting of the historic property would change, but its setting within the district, including the internal spatial

arrangement and design of the buildings that contribute to the historic significance of the property, would be maintained, as would the property's character-defining features.

Dump trucks and rollers would be used for the street improvements, and pile drivers would be required for the grade separation. Trucks, bulldozers, and other construction equipment would be used for the OCS. Although pile driving would be required and the historic district is nearby, there is not a potential for vibration damage during construction due to the building type of the contributing elements nearest to the construction areas (large two to three-story reinforced concrete or engineered concrete buildings).

- D3-4: Broadway (Buena Vista) Viaduct (Bridge #53C0545)**—The HSR Build Alternative would encroach on this historic property's boundaries and may cause physical destruction of, damage to, or alteration of this historic property. An at-grade HSR alignment would be built within the existing railroad right-of-way that passes beneath the bridge on the west bank of the Los Angeles River. The electrified tracks with OCS and access-restriction fences would be installed between two of the bridge's piers. A new intrusion-protection railing would be built on the historic bridge deck above the HSR alignment to prevent people and objects from entering the right-of-way from the bridge. The Authority proposes a property-specific mitigation measure that would require the Authority to work with consulting parties to design intrusion-protection railing that would minimize this potential direct adverse effect to the maximum extent feasible (CUL-MM#12). In addition, project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1), mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2), a pre-construction conditions assessment and plan for protection and repair (CUL-IAMF#6), and a built-environment monitoring plan (CUL-IAMF#7).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity of setting, nor would the project affect the property's transportation infrastructure use. The new access-restriction fence, HSR tracks, and OCS would be visible to the north and south by drivers and pedestrians on the bridge deck looking out over the bridge railings. These features would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that already define the physical context of the resource. In addition to carrying Broadway over the Los Angeles River, this bridge was also constructed to pass over the rail lines that parallel the river banks. As a result, railroad infrastructure has always been part of the setting of this historic property, and introduction of this new rail technology within the existing right-of-way would not diminish the integrity of this resource or prevent it from conveying its historic significance.

Construction of the HSR Build Alternative would take place near two piers of the Broadway Viaduct, which is a large, reinforced concrete structure. Trucks, bulldozers, and other construction equipment would be used for construction of the access-restriction fence, tracks, and OCS, but high-intensity uses, including pile driving, would not be required. Although construction would take place close to the historic property, there is not a potential for vibration damage during construction due to the historic property's building type (reinforced concrete) and the nature of the proposed construction activity.

- D3-5: Spring Street Viaduct (Bridge #53C0859)**—The HSR Build Alternative would encroach on this historic property's boundaries and may cause physical destruction of, damage to, or alteration of this historic property. An at-grade HSR alignment would be built within the existing railroad right-of-way that passes beneath the bridge on the west bank of the Los Angeles River. The electrified tracks with OCS and restriction fences would be between two of the bridge's piers. A new intrusion-protection railing would be built on the historic bridge deck above the HSR alignment to prevent people and objects from entering the right-of-way from the bridge. The Authority proposes a property-specific mitigation measure that would require the Authority to work with consulting parties to design intrusion-protection railing that would minimize this potential direct adverse effect to the maximum

extent feasible (CUL-MM#12). Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1), mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2), a pre-construction conditions assessment and plan for protection and repair (CUL-IAMF#6), a built-environment monitoring plan (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity of setting, nor would the project affect the historic property's transportation infrastructure use. The new access-restriction fence, HSR tracks, and OCS would be visible to the north and south by drivers and pedestrians on the bridge deck looking out over the bridge railings. These features would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that already define the physical context of the resource. In addition to carrying Spring Street over the Los Angeles River, this bridge was also built to pass over the rail lines that parallel the river banks. As a result, railroad infrastructure has always been part of the setting of this historic property, and introduction of this new rail technology within the existing right-of-way would not diminish the integrity of this resource or prevent it from conveying its historic significance.

Construction of the HSR Build Alternative would take place near two piers of the Spring Street Viaduct, which is a large, reinforced concrete structure. Trucks, bulldozers, and other construction equipment would be used for construction of the access-restriction fence, HSR tracks, and OCS near the base of the Spring Street Viaduct piers, but high-intensity uses, including pile driving, would not be required. Although construction would take place near the historic property, there is not a potential for vibration damage during construction due to the historic property's building type (reinforced concrete) and the nature of the proposed construction activity.

- **D3-6: Main Street Bridge (Bridge #53C1010)**—The HSR Build Alternative would not physically encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of or damage to the historic property. However, the HSR Build Alternative would result in alteration of the property that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties and would change the character of the property's use and physical setting in a manner that would diminish its integrity. The HSR Build Alternative would construct a new Main Street Bridge immediately north of the historic Main Street Bridge. The new bridge would be an elevated structure spanning the Los Angeles River and the existing railroad rights-of-way on the river's east and west banks. The existing railroad tracks that cross at grade on the west end of the historic bridge would be replaced with HSR tracks, including OCS and access-restriction fences. For purposes of this analysis, it is assumed that this historic bridge would be maintained in place but would no longer function as part of the street network, and that the public right-of-way on either side of the bridge would be modified to terminate in a cul-de-sac on the west and a dead end on the east. Access-restriction fences associated with the HSR alignment would prevent access from the west, and intrusion-protection railing would be installed at the bridge's east end to limit access to maintenance vehicles only. As the owner of the Main Street Bridge, the City of Los Angeles would be responsible for the ongoing maintenance of the historic bridge. The Authority proposes a property-specific mitigation measure for this direct adverse effect, which would require the Authority to facilitate a feasibility study to explore design options to maintain the historic use of the Main Street Bridge (CUL-MM#13). For example, further study may identify options for pedestrian and bicycle use of the bridge. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1), mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2), a pre-construction conditions assessment and plan for protection and repair

(CUL-IAMF#6), a built-environment monitoring plan (CUL-IAMF#7), and implementation of protection/stabilization measures (CUL-IAMF#8).

The HSR Build Alternative would change the character of the property's use and physical features within the property's setting that contribute to its historic significance, and the introduction of visual elements would diminish the integrity of the property's historic features. The proposed Main Street grade separation would result in a perceptible change in the character of the historic property's surroundings and it would disrupt the relationship between the historic bridge and surrounding features and open space, resulting in diminished integrity of setting. A standard mitigation measure (CUL-MM#7) is proposed for this adverse effect, requiring the Authority to work with consulting parties to develop interpretive or educational materials for the Main Street Bridge.

Construction of the elevated Main Street grade separation would take place north of the historic bridge, with the nearest pier approximately 90 feet northeast of the historic property. Street improvements would take place on either side of the bridge, including repaving and reprofiling roadways and constructing sidewalks, curbs, and gutters. Dump trucks and rollers would be used for the street improvements, and pile drivers would be required for the grade separation. Trucks, bulldozers, and other construction equipment would be used for the HSR tracks, OCS, and restriction fences. Although pile driving would be required near the historic property, there is not a potential for vibration damage during construction due to the historic property's building type (reinforced concrete).

- D3-7: Cesar E. Chavez Avenue (Macy Street) Viaduct (Bridge #53C0130)**—The HSR Build Alternative would not encroach on this historic property's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historic property. The HSR Build Alternative does not include any construction within the historic property or the immediate vicinity. The nearest proposed features are the HSR tracks and platforms at LAUS, which is approximately 0.25 mile west of the Cesar E. Chavez Avenue Viaduct. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity, nor would the project affect use of the historic property as a bridge. The distance between the proposed HSR tracks and platforms at LAUS and the historic bridge (approximately 0.25 mile) is great enough that the HSR Build Alternative would not negatively affect the setting of the Cesar E. Chavez Avenue Viaduct or obscure its character-defining features from public view.

Trucks, bulldozers, and other construction equipment would be used to modify tracks and platforms at LAUS for HSR use, approximately 0.25 mile west. There is not a potential for vibration damage during construction due to its distance from the construction area.

- Van de Kamp's Holland Dutch Bakery (Los Angeles Historic-Cultural Monument #569, CEQA-Only Property)**—The HSR Build Alternative would not encroach on this historical resource's boundaries, nor would it require any construction activities that would cause physical destruction of, damage to, or alteration of this historical resource. As a result of alterations to this property in 2010, it does not retain sufficient integrity to convey its historic significance. Therefore, it is eligible for neither the NRHP nor CRHR and is not a historic property for the purposes of compliance with NEPA and Section 106. The property is a historical resource for the purposes of CEQA because it is listed as a local landmark in the City of Los Angeles. Therefore, this analysis is only applicable to CEQA and is not applicable to NEPA.

The HSR Build Alternative would shift the nonelectrified tracks within the existing railroad right-of-way that abuts the south property line of the legal parcel and construct an at-grade HSR alignment approximately 110 feet south of the nearest contributing building, which is the former

receiving department building. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1) and mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2).

The HSR Build Alternative would not change the character of the historical resource's use or physical setting in a manner that would diminish its integrity, nor would the project affect the industrial use of the historical resource. The new HSR access-restriction fence, electrified tracks, and OCS would be visible from the resource and its vicinity. These structures would be recognizable as new but generally perceived as similar in form to existing rail infrastructure and supporting rail activities similar to those that define the physical context of the resource.

Trucks, bulldozers, and other construction equipment would be used, but high-intensity activities, including pile driving, would not take place at this location. Although construction would take place near the historic property, there is no potential for vibration damage during construction due to the construction type of the nearest contributing building (reinforced concrete) and the nature of the proposed construction activity.

CEQA Conclusion

Even with implementation of the CUL-IAMF#1, CUL-IAMF#2, CUL-IAMF#6, CUL-IAMF#7, and CUL-IAMF#8 (which would require cultural resources to be added to construction plans, require worker training sessions to recognize potential cultural resources, require a plan for the protection of historic built resources, require a built environment monitoring plan, and require protection and/or stabilization measures), the construction effects on historic built resources (Impact CUL #3) under CEQA would remain significant because of the physical alteration impacts on Arroyo Seco Parkway, Broadway Viaduct, Spring Street Viaduct, and Main Street Bridge. Mitigation measures CUL-MM#7 and CUL-MM#12 would be implemented for Arroyo Seco Parkway, Broadway Viaduct, and Spring Street Viaduct. CUL-MM#7 and CUL-MM#13 would be implemented for Main Street Bridge. CUL-MM#7 would require the Authority to work with consulting parties to develop interpretive or educational materials for the Main Street Bridge; CUL-MM#12 would require the design of intrusion-protection railings for the Arroyo Seco Parkway Historic Bridge, the Broadway Viaduct Bridge, and the Spring Street Viaduct Bridge. CUL-MM#13 would require the Authority to develop a feasibility study to explore design options that would maintain the historic use of the Main Street Bridge to the maximum extent feasible while still meeting the safety requirements of the HSR Build Alternative. These mitigation measures would not reduce the impact below a level of significance because physical alteration of the resources would occur such that the significance of these historical resources would be materially impaired. Therefore, the construction effects on historic built resources would remain significant and unavoidable even after the implementation of mitigation.

Section 106 Findings

Under Section 106, construction of the HSR Build Alternative would have an adverse effect on the Arroyo Seco Parkway Historic District, the Broadway Viaduct, and the Spring Street Viaduct. A new intrusion-protection railing would be built on the historic bridge decks above the HSR alignment to prevent people and objects from entering the right-of-way from the bridge. Project design incorporates IAMFs to prevent accidental damage to cultural resources during construction, including a geospatial data layer depicting the location of cultural resources on construction drawings (CUL-IAMF#1), mandatory training for contractors to protect cultural resources during construction (CUL-IAMF#2), pre-construction conditions assessment and plan for protection of historic built resources (CUL-IAMF#6), a built environment monitoring plan (CUL-IAMF#7), and protection and/or stabilization measures (CUL-IAMF#8). CUL-MM#12 would require the Authority to work with consulting parties to develop a design for the intrusion-protection railing that would minimize this adverse effect to the maximum extent feasible.

Construction of the HSR Build Alternative would result in adverse effects on the Main Street Bridge. The bridge would be maintained in place, but it would no longer function as part of the street network; its defining characteristic—its form and function as a bridge—would be changed.

CUL-MM#13 would require the Authority to facilitate a feasibility study to explore design options that would maintain the historic use of the Main Street Bridge. The new Main Street grade separation directly north of the historic bridge would also result in diminished integrity of setting. CUL-MM#7 would require the Authority to work with consulting parties to develop interpretive or educational materials for the Main Street Bridge.

There would be no adverse effects on the other 21 built historic properties.

Operations Impacts

Operations and maintenance of the HSR Build Alternative would include inspection and maintenance along the track and railroad right-of-way, as well as on the structures, fencing, power system, train control, electric interconnection facilities, and communications. Chapter 2, Alternatives describes operations and maintenance.

Impact CUL #4: Operations Impacts on Archaeological Resources

Activities that affect archaeological resources are typically associated only with project construction. During operation, access would be restricted to maintenance persons and vehicles within the fenced right-of-way. Thus, it is unlikely that operation of the HSR Build Alternative would affect known or unknown archaeological sites.

CEQA Conclusion

No operations impact on archaeological resources would occur that would cause a substantial adverse change in the significance of an archaeological resource. Therefore, CEQA does not require any mitigation.

Section 106 Findings

The result would be no effect under Section 106 because operation of the HSR Build Alternative would be unlikely to disturb either known or unknown archaeological resources.

Impact CUL #5: Operations Impacts on Historic Built Resources

Operations and maintenance effects on the 25 historic built resources identified in the Burbank to Los Angeles Project Section APE include noise or vibration. However, the anticipated noise from the HSR Build Alternative would not indirectly affect any of the historic properties within the APE because they do not derive their NRHP significance from being located in a quiet setting.

According to the *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (FRA 2012), it is extremely rare for vibration from train operations to cause any sort of building damage, even minor cosmetic damage. However, there is sometimes concern about damage to fragile historic buildings, such as the Valley Maid Creamery, located near the right-of-way. Even in these cases, damage is unlikely except when the track would be very close to the structure. Therefore, vibration from operation of the HSR Build Alternative is not anticipated to damage any of the historic resources within the APE, including the Valley Maid Creamery.

CEQA Conclusion

Noise and vibration impacts on historic built resources from operation and maintenance of the HSR Build Alternative would be less than significant under CEQA, because, as described above, (1) the historic properties within the APE do not derive their significance from being in a quiet setting, and (2) vibration impacts would not demolish, destroy, or alter any of the historic resources within the APE. Therefore, CEQA does not require any mitigation.

Section 106 Finding

The result would be no adverse effect under Section 106 because operation and maintenance of the HSR Build Alternative would be unlikely to cause impacts on historic built resources.

3.17.8 Mitigation Measures

This section describes the mitigation measures the Authority has identified for impacts under NEPA and significant impacts under CEQA that IAMFs would not adequately avoid or minimize.

In compliance with Section 106, mitigation measures are negotiated in consultation that may include federal, state, and local agencies; Native American tribes; and other interested parties.

Mitigation measures will be finalized as part of the MOA development process, which will conclude prior to issuance of the Record of Decision. Agreed-upon mitigation would be implemented after the MOA is executed. The mitigation measures described below include mitigation measures and commitments that would take place prior to, during, and following construction.

In addition to the mitigation measures below, several IAMFs for archaeology and historic built resources would be implemented prior to construction (see Chapter 2 and Section 3.17.5.3). These include completion of any remaining pedestrian surveys and inventories; protective measures, such as conducting archaeological sensitivity training; and preserving sites in place where feasible. For built resources, these IAMFs would include the completion of building conditions assessments or historic structure reports, and development and implementation of protection and stabilization plans. During construction, IAMFs would include vibration monitoring for built resources, monitoring for archaeological resources during ground-disturbing activities in archaeologically sensitive areas, and protocols for halting work during construction in the event of a discovery of archaeological resources or damage to built resources. The Authority has developed program-wide IAMFs (refer to Appendix 2-B) and mitigation measures, some of which may not be applicable to this project section.

Pre-construction mitigation measures may include development of treatment plans for historic built resources and protecting historic built resources using various methods. Post-construction mitigation measures may include restoration of affected landscape, buildings, or structures to pre-construction condition following the Secretary of the Interior's guidelines for the treatment of historic properties. This includes rehabilitation of properties that suffered unanticipated impacts, to the extent feasible. Mitigation measures that could take place prior to, during, or after construction may include implementation of interpretive programs, including displays and interpretive signage.

Mitigation measures, along with the IAMFs, would strive to provide the greatest level of protection feasible in light of project costs and logistics, and technological and environmental conditions. Preservation in place through methods such as project redesign of relevant facilities to avoid destruction or damage to eligible cultural resources, capping archaeological resources with fill, or deeding resources into conservation easements is always preferable if these methods are also compatible with project objectives. Extensive documentation of built environment resources that would be moved or demolished, or data recovery of significant archaeological sites, where destruction is not avoidable would be at the opposite end of this spectrum.

Under Section 106, regulatory requirements exist that must be followed in accordance with the PA. The PA stipulates that an MOA would be prepared for each project section to detail the project's commitments to implement these treatments. The Authority would develop the MOA for the Burbank to Los Angeles Project Section in consultation with the SHPO, Surface Transportation Board, Los Angeles Conservancy, Southern California Association of Governments, City of Los Angeles Office of Historic Resources, Gabrieleño Band of Mission Indians—Kizh Nation, the Fernandeano Tataviam Band of Mission Indians, and the Gabrielino-Tongva Nation and includes input from the signatories and other interested members of the public in the development of treatment measures. The MOA will be executed by the time the Record of Decision is issued for the Burbank to Los Angeles Project Section.

The PA stipulates that two treatment plans be developed: an ATP and a BETP. These plans, prepared in consultation with the MOA signatories and concurring parties, provide specific performance standards that make sure that each impact would be avoided, minimized, or mitigated to the extent possible and provide enforceable performance standards to follow the NRHP and the Secretary of Interior's standards when implementing the mitigation measures (Stipulations III and VIII in the PA). These treatment plans would include relevant mitigation measures for the purposes of NEPA and CEQA and implemented in compliance with Section 106; they would be coordinated with the measures included in this EIR/EIS.

Specifically, the ATP would focus on the treatment of known and unknown archaeological resources, and it would require the phased identification, evaluation, and mitigation of

archaeological resources that may be located on parcels for which legal access has yet to be granted. It would also provide requirements for procedures and protocols to be followed in the event of unanticipated discoveries during construction.

The BETP would describe the treatments to be applied to adversely affected resources in the built environment, as well as protection measures for properties to avoid adverse effects. The treatments and measures included would be specific to each property that would be, or has the potential to be, adversely affected by the project.

The treatment plans would be approved and implemented before the start of construction activities that could adversely affect historic properties or historical resources. These requirements would be included in the construction contracts.

In addition to the mitigation measures discussed below, the following conditions or treatments are proposed in the ASR: Addendum 1 (Authority 2019a) to avoid, minimize, or mitigate adverse effects on archaeological historic properties in the APE that may be subject to direct effects from the project. The details of the specific conditions and treatment measures, as well as their implementation, would be stipulated in the MOA and described in detail in the ATP.

1. **Archaeological Testing Before Project Construction**—As the design-build phase of the HSR project moves forward, Extended Phase I and NRHP evaluation testing may be conducted at archaeological historic properties described in this section and at archaeological historic properties identified in the APE during future survey efforts completed for the project, consistent with the Section 106 PA (Stipulation VI.E), as permission to access the sites is received. The purpose of these excavations would be to determine the extent, density, and NRHP eligibility of archaeological deposits in the APE. This testing would be done in coordination with the SHPO, the Authority, and tribal consulting parties. This measure would ensure that adverse effects on archaeological historic properties would be avoided to the extent possible through project redesign or other avoidance measures, including establishment of temporary environmentally sensitive areas during construction.
2. **Project Redesign**—Once the spatial limits of an archaeological historic property have been established, project impacts would be reviewed and the project designs in that specific location examined to determine if it would be possible to avoid the resource. For example, if a site is unearthed during construction, an avoidance option may be to bridge that location rather than build an at-grade alignment. If complete avoidance is not possible, minimization of impacts would be analyzed and design changes implemented to the extent possible to avoid unnecessary impacts on the archaeological site. For example, if a site is unearthed, efforts should be made to determine whether the project could be shifted to only affect a small portion of the site rather than crossing through its center. Mitigation of the remaining impacts on the property would be required.

Project redesign can be costly and time-consuming, and may not be prudent or feasible in certain locations due to engineering and environmental factors. However, ancillary features of the HSR project may potentially be relocated to avoid archaeological properties. Avoidance and minimization should be explored as a first step in all cases.

3. **Intentional Site Burial for Preservation In-Place**—If project engineering concludes that avoidance is not feasible, a process to determine whether the site can be preserved through intentional site burial would be considered. When complete avoidance is not possible, preservation in place is the preferred form of mitigation, pursuant to Cal. Public Res. Code 15126.4(b)(3)(A). To intentionally bury a site, it is necessary to conduct test excavations to determine the vertical and horizontal extent of the identified resources within the area of direct impact. The archaeologist should prepare and implement a design plan to dictate the conditions of the intentional site burial according to the recommendations discussed in the National Park Service Technical Brief Number 5, *Intentional Site Burial: A Technique to Protect Against Natural or Mechanical Loss* (Thorne 1989). Among the requirements of an effective capping, the mechanical process of burying the site must be designed in a manner that would ensure the site matrix is protected during the placement process and during

operation of the HSR system. The ATP would provide the necessary guidance for determining under what conditions intentional site burial is appropriate and how preservation in place is to be successfully achieved. The Authority and the FRA would seek input from tribal consulting parties on the evaluation and implementation of this mitigation measure.

4. **Archaeological Data Recovery Program**—If, through consultation or NRHP evaluation testing, it is determined that an archaeological historic property is present in the APE that could be adversely affected by the project and that the site cannot be completely avoided, implementation of an Archaeological Data Recovery Plan would be required. The ATP would contain the broad programmatic steps that would be taken in the event a data recovery investigation is required. The Archaeological Data Recovery Plan would identify the scientific/historical research questions that are applicable to the resource(s), the data classes the resource(s) is expected to possess, and how the expected data classes would address the applicable research questions. All significant cultural materials recovered would be, as necessary and according to the Archaeological Data Recovery Plan, subject to scientific analysis, professional museum curation, and documentation according to current professional standards, as determined in the project's MOA and ATP. The Authority and the FRA would seek input from the consulting parties for the evaluation and implementation of this mitigation measure.

CUL-MM#1: Mitigate Adverse Effects to Archaeological and Built Environment Resources Identified During Phased Identification. Comply with the Stipulations Regarding the Treatment of Archaeological and Historic Built Resources in the Programmatic Agreement (PA) and Memorandum of Agreement (MOA)

Once parcels are accessible and surveys have been completed, including consultation as stipulated in the MOA, additional archaeological resources may be identified. All built environment resources were adequately visible from the public right-of-way and will not likely require phased identification. For newly identified eligible properties that would be adversely affected, the following process would be followed, which is presented in detail in the BETP and ATP:

- The Authority would consult with the MOA signatories and concurring parties to determine the preferred treatment of the properties/resources and appropriate mitigation measures.
- For CRHR-eligible archaeological resources, the Authority would determine if these resources can feasibly be preserved in place or if data recovery is necessary. The methods of preservation in place would be considered in the order of priority provided in CEQA Guidelines § 15126.4(b)(3). If data recovery is the only feasible treatment, the Authority would adopt a Data Recovery Plan as required under CEQA Guidelines § 15126.4(b)(3)(C).
- Should data recovery be necessary, the Contractor's Principal Investigator, in consultation with the MOA signatories and consulting parties, would prepare a Data Recovery Plan for approval from the Authority, also in consultation with the MOA signatories. Upon approval, the Contractor's Principal Investigator would implement the plan.
- For archaeological resources, the Authority would also determine if the resource is a unique archaeological site under CEQA. If the resource is not a historical resource but is an archaeological site the resource would be treated as required in Cal. Public Res. Code 21083.2 by following protection, data recovery, and other appropriate steps outlined in the ATP. The review and approval requirements for these documents are outlined in the ATP.

Impacts from Implementing Mitigation Measure CUL-MM#1

This mitigation measure would apply to the project site (entirely within the project footprint). This mitigation measure would not trigger additional ground-disturbing activities outside of the project footprint and would not change the character or significantly increase the overall amount of construction activity. Therefore, it is anticipated that the impacts of implementing this mitigation measure would be less than significant under CEQA.

CUL-MM#2: Halt Work in the Event of an Archaeological Discovery and Comply with the Programmatic Agreement (PA), Memorandum of Agreement (MOA), Archaeological Treatment Plan (ATP), and all State and Federal Laws, as Applicable

During construction (i.e., any ground-disturbing activities, including clearing and grubbing) should there be an unanticipated discovery, the Contractor shall follow the procedures for unanticipated discoveries as stipulated in the PA, MOA, and associated ATP. The procedures must also be consistent with the following: the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 Federal Register 44716-42), as amended (National Park Service); and Guidelines for the Implementation of CEQA, as amended (Title 14 California Code of Regulations Chapter 3, Article 9, Sections 15120-15132). In the event of a discovery in California Department of Transportation (Caltrans) right-of-way, the Authority would notify appropriate Caltrans staff in accordance with any provisions of the ATP. Should the discovery include human remains, the Contractor, the Authority, and the FRA shall comply with federal and state regulations and guidelines regarding the treatment of human remains, including relevant sections of Native American Graves Protection and Repatriation Act (§ 3(c)(d)); California Health and Safety Code, Section 8010 et seq.; and Cal. Public Res. Code Section 5097.98; and consult with the Native American Heritage Commission, tribal groups, and the SHPO.

In the event of an unanticipated archaeological discovery, the contractor would cease work in the immediate vicinity of the find, based on the direction of the archaeological monitor or the apparent location of cultural resources if no monitor is present. If no qualified archaeologist is present, no work can commence until it is approved by the qualified archaeologist in accordance with the MOA, ATP, and monitoring plan. The Contractor's qualified archaeologist would assess the potential significance of the find and make recommendations for further evaluation and treatment as necessary. These steps may include evaluation for the CRHR and NRHP and necessary treatment to resolve significant effects if the resource is an historical resource or historic property. If, after documentation is reviewed by the Authority, and they determine it is a historic property, and the SHPO concurs that the resource is eligible for the NRHP, or the Authority determines it is eligible for the CRHR, preservation in place would be considered by the Authority in the order of priority provided in CEQA Guidelines § 15126.4(b)(3) and in consultation with the signatories and consulting parties to the MOA. If data recovery is the only feasible mitigation, the Contractor's qualified Principal Investigator would prepare a data recovery plan as required under CEQA Guidelines § 15126.4(b)(3)(C), the MOA, and ATP for the Authority's approval.

If human remains are discovered on state-owned or private lands the contractor would contact the relevant county coroner to allow the coroner to determine if an investigation regarding the cause of death is required. If no investigation is required and the remains are of Native American origin, the Authority would contact the Native American Heritage Commission to identify the most likely descendant. The most likely descendant would be empowered to reinter the remains with appropriate dignity. If the most likely descendant fails to make a recommendation, the remains would be reinterred in a location not subject to further disturbance and the location would be recorded with the Native American Heritage Commission and relevant information center of the CHRIS.

If human remains are part of an archaeological site, the Authority and contractor would, in consultation with the most likely descendant and other consulting parties, consider preservation in place as the first option, in the order of priority called for in CEQA Guidelines Section 15126.4(b)(3).

In consultation with the relevant Native American tribes, the Authority may conduct scientific analysis on the human remains if called for under a Data Recovery Plan and amenable to all consulting parties. The Authority would work with the most likely descendant to satisfy the requirements of Cal. Public Res. Code Section 5097.98. Performance tracking of this mitigation measure would be based on successful implementation and acceptance of the documentation by the SHPO and appropriate consulting parties.

Impacts from Implementing Mitigation Measure CUL-MM#2

No ground-disturbing activities or property acquisition would be necessary to comply with this mitigation measure if the site can be preserved in place. In this case, there would be no impacts on other resources as a result of implementing this mitigation measure. If intentional burial is required, the new burial site would be selected in consultation with the most likely descendant and surveyed by qualified archaeologists prior to excavation. A site would be selected that would not result in impacts on any other resource types, such as biological. Therefore, it is anticipated that the impacts of implementing this mitigation, should intentional burial be necessary, would be less than significant under CEQA.

CUL-MM#3: Other Mitigation for Effects to Archaeological Sites

Due to limited access to private properties during the environmental review phase of this project, the Authority's ability to fully identify and evaluate archaeological resources within the APE has, correspondingly, also been limited. Thus, the majority of the project APE has not been subject to archaeological field inventories. As pedestrian field surveys are a necessary component of the archaeological resource identification and evaluation effort, the commitment to complete the field surveys, prior to ground-disturbing activities associated with the project, would be codified in the MOA that will be executed as a condition of this Final EIR/EIS.

Access to previously inaccessible properties to complete the archaeological resource identification effort is expected to be available after the Record of Decision, during the design-build phase of the project. However, due to the design constraints associated with constructing a HSR system, the ability to shift the alignment to avoid any newly identified archaeological resources at this late phase of the project delivery process would be substantially limited and/or unlikely, because the alignment would already be established. As such, impacts/effects on as-yet-identified significant archaeological resources as a result of this project are anticipated; however, the nature and quantity of such effects remains unknown until completion of the archaeological field identification and evaluation effort.

Protocols for the identification, evaluation, treatment, and data-recovery mitigation of as-yet-identified archaeological resources are addressed in the MOA and ATP. Efforts to develop meaningful mitigation measures for effects on as-yet-identified Native American archaeological resources or historic-era archaeological resources that cannot be avoided would be negotiated with the tribal consulting parties or other interested parties, as appropriate. Measures that are negotiated among the MOA signatories and tribal consulting parties would be the responsibility of the Authority to implement.

Impacts from Implementing Mitigation Measure CUL-MM#3

If intentional burial is required, a new burial site would be selected that would not result in impacts on any other resource types, such as biological. Therefore, it is anticipated that the impacts of implementing this part of this mitigation measure, should intentional burial be necessary, would be less than significant under CEQA. Educational programs, internships, and curation are examples of mitigation measures that do not result in ground-disturbing activities or property acquisition. Therefore, there would be no impacts on other resources as a result of implementing these aspects of this mitigation measure.

CUL-MM#7: Prepare Interpretive or Educational Materials

The Authority-prepared MOA and BETP would identify historic properties and historical resources that would be subject to historic interpretation or preparation of educational materials. Interpretive and educational materials would address the significance of the properties that would be affected by the project. Interpretive or educational materials could include, but are not limited to, brochures, videos, websites, study guides, teaching guides, articles or reports for general publication, commemorative plaques, or exhibits. The agreed-upon method of interpretation would be specified in the BETP for each property, resulting from consultation with the SHPO, MOA signatories, and concurring parties. The Contractor would be responsible for assembling the appropriate interdisciplinary team to fulfill the mitigation. The required professionals and their qualifications would be specified in the BETP.

In the preparation of the interpretive or educational materials, the Contractor's team would use previous research included in the environmental technical documents, images, narrative history, drawings, or other material produced for the mitigation described above. The interpretive or educational materials should be made available to the public in physical or digital formats, at local libraries, historical societies, or public buildings, as specified in the BETP.

Impacts of Implementing Mitigation Measure CUL-MM#7

No ground-disturbing activities or property acquisition would be necessary to comply with this mitigation measure. Therefore, there would be no impacts under CEQA on other resources as a result of implementing this mitigation measure.

CUL-MM#12: Design of Intrusion-Protection Railing for Historic Bridges

A property-specific mitigation measure is proposed, requiring the Authority to work with consulting parties to develop a design for an intrusion-protection railing that would minimize the potential direct adverse effect to the maximum extent feasible. A new intrusion-protection railing would be built on the historic bridge decks above the HSR alignment to prevent people and objects from entering the right-of-way from the bridge. This would apply to three historic resources: the Arroyo Seco Parkway Historic District (specifically the Los Angeles River Bridge), the Broadway Viaduct, and the Spring Street Viaduct.

Impacts from Implementing Mitigation Measure CUL-MM#12

No ground-disturbing activities or property acquisition would be necessary to comply with this mitigation measure. Some visual impacts may occur as a result of constructing the intrusion protection railings; however, AVQ-IAMF#1 and CUL-IAMF#6 would be implemented to promote context-sensitive visual unity, intactness, and integrity. AVQ-IAMF#1 would promote aesthetic consistency within the local context and CUL-IAMF#6 would provide for a pre-construction assessment of the three historic resources. By implementing AVQ-IAMF#1 and CUL-IAMF#6, no significant impacts would result from implementing CUL-MM#12.

CUL-MM#13: Main Street Bridge Access Feasibility Study

A property-specific mitigation measure is proposed, stating that the Authority would facilitate the development of a feasibility study to explore design options that would maintain the historic use of the Main Street Bridge to the maximum extent feasible while still meeting the safety requirements of the HSR Build Alternative.

Impacts from Implementing Mitigation Measure CUL-MM13

No ground-disturbing activities or property acquisition would be necessary to comply with this mitigation measure. Therefore, there would be no impacts under CEQA on other resources as a result of implementing this mitigation measure.

3.17.8.1 Early Action Projects

As described in Chapter 2, Section 2.5.2.9, early action projects would be completed in collaboration with local and regional agencies. They include grade separations and improvements at regional passenger rail stations. These early action projects are analyzed in further detail to allow the agencies to adopt the findings and mitigation measures as needed to construct the projects. The following cultural mitigation measures would be required for the early action projects, as presented in Table 3.17-12.

Table 3.17-12 Mitigation Measures Required for Early Action Projects

Early Action Project	Impacts	Mitigation Measure
Downtown Burbank Metrolink Station	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
Sonora Avenue Grade Separation	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
Grandview Avenue Grade Separation	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
Flower Street Grade Separation	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
Goodwin Avenue/Chevy Chase Drive Grade Separation	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
Main Street Grade Separation	Impact CUL #2	CUL-MM#1 CUL-MM#2 CUL-MM#3
	Impact CUL #5	CUL-MM#7

3.17.9 NEPA Impact Summary

This section summarizes the impacts of the HSR Build Alternative and compares them to the anticipated impacts of the No Project Alternative.

Under the No Project Alternative, growth and development would continue and the resulting direct and indirect impacts on cultural resources would still occur. Development activities and ongoing infrastructure maintenance, such as continued operation of existing roads, highways, utilities, airports, and railways, would continue to result in impacts, including construction-related disturbance to unknown archaeological sites, increased public access leading to site disturbance, and possible impacts on historic built resources.

As discussed below, construction and operation of the HSR Build Alternative would have an adverse effect on three historic built resources (Arroyo Seco Parkway Historic District [including the Los Angeles River Bridge], the Broadway Viaduct, and the Spring Street Viaduct), adverse effects on a historic built resource (the Main Street Bridge), and a potential effect on archaeological resource P-19-101229 (a vestige of a small circular brick wall feature) that is assumed eligible at this time. If P-19-101229 is determined ineligible, then there would be no impact on this resource. Under NEPA, the HSR Build Alternative would result in an impact on the Arroyo Seco Parkway Historic District, the Broadway Viaduct, and the Spring Street Viaduct; on the Main Street Bridge; and an impact on archaeological resource P-19-101229. In addition, there

is a potential for construction to affect unknown archaeological resources if they are discovered during site surveys and cannot be avoided, or if they are discovered during construction.⁵

Because the exact location of archaeological resource P-19-101229 is not known at this time, there remains a potential that construction activities could result in the partial or total destruction or removal of this resource. CUL-MM#1 would require compliance with the PA and MOA and mitigation of adverse effects on properties identified during phased identification. However, because of the nature of the HSR project and the design requirements, an established alignment may not be able to be altered to avoid archaeological resource P-19-101229 by the time property access is granted and the exact location of this resource is determined. Therefore, until the exact location of this resource can be determined, it is assumed that construction of the HSR Build Alternative would result in an impact on this resource.

Because of limited access to private lands in the APE, it is possible that as-yet-unknown NRHP-eligible archaeological sites could be identified within the APE as part of the Section 106 phased historic properties identification effort that would be conducted when property access becomes available, prior to ground-disturbing activities. If such sites are identified, found to be eligible, and cannot be avoided, impacts on archaeological properties would occur. The HSR Build Alternative also has the potential to damage previously unidentified archaeological sites that may not be identified through survey prior to construction. While cultural resource inventories would be completed once legal access is secured, no inventory can ensure that all resources are identified. Furthermore, in areas that are paved, surveys cannot be conducted.

Because these sites may be historic properties, damage to these sites may diminish their integrity. Additionally, given the nature of the HSR Project and the design requirements, an established alignment may not be able to be altered to avoid archaeological sites discovered by the time property access is granted. For these reasons the impact of the HSR Build Alternative could be adverse.

The IAMFs and mitigation measures listed below would reduce the potential for ground-disturbance-related impacts on known and as-yet-undiscovered archaeological sites to occur before and during construction. The IAMFs (outlined fully in Section 3.17.5.3) are implemented as part of the design of the project and include:

- CUL-IAMF#1: Requires a geospatial layer of any archaeological sites be added to construction drawings.
- CUL-IAMF#2: Requires construction personnel to attend a WEAP training session to be able to recognize potential cultural resources and to follow the appropriate procedures should a discovery be made during construction.
- CUL-IAMF#3: Requires completion of archaeological surveys prior to any ground disturbing activities.
- CUL-IAMF#4: Allows for the relocation of laydown sites if archaeological sites are discovered during survey.
- CUL-IAMF#5: Requires the preparation of an archaeological monitoring plan.

The following mitigation measures (outlined fully in Section 3.17.8) would reduce impacts on archaeological resources prior to and during construction:

- CUL-MM#1: Requires mitigation of adverse effects on properties identified during phased identification.
- CUL-MM#2: Requires that work be halted in the event of an archaeological discovery.
- CUL-MM#3: Requires mitigation for effects to archaeological sites.

⁵ For Section 106, the FOE (Authority2019c) concluded that there would be adverse effects for the Main Street Bridge and for P-19-101229. The FOE concluded no effect for all other resources.

These measures would reduce the potential for impacts on archaeological resources should they be known or discovered before or during construction activities. However, as stated previously, because of the nature of the HSR project and the design requirements, an established alignment may not be able to be altered to avoid archaeological sites discovered by the time property access is granted. Therefore, the HSR Build Alternative could result in an impact under NEPA to unknown archaeological resources.

Surveys identified 25 historic built properties listed or eligible for listing on the NRHP and the CRHR within the APE for the Burbank to Los Angeles Project Section. As stated above, the HSR Build Alternative would result in impacts to Arroyo Seco Parkway Historic District, the Broadway Viaduct, the Spring Street Viaduct, and the Main Street Bridge.

The following IAMFs and mitigations measures would reduce the potential for impacts on historic built resources:

- CUL-IAMF#1: Requires a geospatial layer of any historic properties to be added to construction drawings.
- CUL-IAMF#2: Requires construction personnel to attend a WEAP training session to be able to recognize potential cultural resources and to follow the appropriate procedures should a discovery be made during construction.
- CUL-IAMF#6: Requires an assessment of the condition of construction-adjacent historic properties and preparation of a Plan for the Protection of Historic Built Resources and Repair of Inadvertent Damage.
- CUL-IAMF#7: Requires the preparation of a Built Environment Monitoring Plan.
- CUL-IAMF#8: Requires the implementation of protective and/or stabilizing measures.

Mitigation measures developed to reduce impacts on historic built resources include the following:

- CUL-MM#7: Requires the preparation of interpretive and educational materials.
- CUL-MM#12: Requires the Authority to work with consulting parties to develop a design for the intrusion-protection railing that would minimize this adverse effect to the maximum extent feasible.
- CUL-MM#13: Requires the Authority to facilitate the development of a feasibility study to explore design options that would maintain the historic use of the Main Street Bridge to the maximum extent feasible while still meeting the safety requirements of the HSR Build Alternative.

Even with implementation of CUL-MM#7, which requires preparation of interpretive or educational information for the historic Main Street Bridge, the HSR Build Alternative would result in effects on the Main Street Bridge as a result of changes to the character of the property's use and physical features within the property's setting that contribute to its historic significance, as well as the introduction of visual elements that would diminish the integrity of the property's significant historic features. Additionally, even with implementation of tailored mitigation measure (CUL-MM#12), the HSR Build Alternative would result in effects on the properties listed in Table 3.17-13 as a result of changes to the physical features within the properties and would result in a visual change to one bridge (Main Street Bridge). Table 3.17-13 identifies the effects and mitigation measures for each historic property, both archaeological properties and built properties, under the NHPA. (The table does not include Van de Kamp's Holland Dutch Bakery because, while the property is a historical resource under CEQA, it is not a historic property under NEPA, as noted in Section 3.17.6.2, Overview of Historic Built Resource.)

Table 3.17-13 Summary of Effects under the National Historic Preservation Act

Properties	Effect before Mitigation	Mitigation Measure	Effect Findings after Mitigation
Archaeological Properties			
P-19-001575	No effect	No mitigation measures are required	Not Applicable
P-19-101229	Phased	CUL-MM#1 CUL-MM#2 CUL-MM#3	Phased
P-19-187085	No effect	No mitigation measures are required	Not Applicable
Architectural Properties (Built Resources)			
Standard Oil Company Facilities (D1-1)	No Adverse Effect	No mitigation measures are required	Not Applicable
Kelite Factory (D1-2)	No Adverse Effect	No mitigation measures are required	Not Applicable
R. Schiffmann Medical Company (D1-3)	No Adverse Effect	No mitigation measures are required	Not Applicable
Folk Victorian Residence (D1-4)	No Adverse Effect	No mitigation measures are required	Not Applicable
Lanza Bros. Market (D1-5)	No Adverse Effect	No mitigation measures are required	Not Applicable
Taylor Yard Signal Tower (D1-6)	No Adverse Effect	No mitigation measures are required	Not Applicable
Valley Maid Creamery (D1-7)	No Adverse Effect	No mitigation measures are required	Not Applicable
L.W. Grayson Steam-Electric Generating Station (D1-8)	No Adverse Effect	No mitigation measures are required	Not Applicable
Aero Industries Technical Institute (D1-9)	No Adverse Effect	No mitigation measures are required	Not Applicable
Municipal Power & Light (D1-10)	No Adverse Effect	No mitigation measures are required	Not Applicable
Los Angeles Basket Company (D1-11)	No Adverse Effect	No mitigation measures are required	Not Applicable
Vignes Street Underpass (D1-12)	No Adverse Effect	No mitigation measures are required	Not Applicable
Los Angeles River Channel (D1-13)	No Adverse Effect	No mitigation measures are required	Not Applicable
Post Office Terminal Annex (D2-1)	No Adverse Effect	No mitigation measures are required	Not Applicable
Los Angeles Union Station Passenger Terminal and Grounds (D2-2)	No Adverse Effect	No mitigation measures are required	Not Applicable
Glendale Southern Pacific Railroad Depot (D2-3)	No Adverse Effect	No mitigation measures are required	Not Applicable

Properties	Effect before Mitigation	Mitigation Measure	Effect Findings after Mitigation
Arroyo Seco Parkway Historic District (D2-4)	Adverse Effect	CUL-MM#12	Adverse Effect
William Mead Homes (D3-1)	No Adverse Effect	No mitigation measures are required	Not Applicable
Mission Tower (D3-2)	No Adverse Effect	No mitigation measures are required	Not Applicable
Bureau of Power and Light General Services Headquarters (D3-3)	No Adverse Effect	No mitigation measures are required	Not Applicable
Broadway (Buena Vista) Viaduct (D3-4)	Adverse Effect	CUL-MM#12	Adverse Effect
Spring Street Viaduct (D3-5)	Adverse Effect	CUL-MM#12	Adverse Effect
Main Street Bridge (D3-6)	Adverse Effect	CUL-MM#7 CUL-MM#13	Adverse Effect
Cesar E. Chavez Avenue (Macy Street) Viaduct (D3-7)	No Adverse Effect	No Mitigation Measures are Required	Not Applicable

3.17.10 CEQA Significance Conclusions

Table 3.17-14 provides a summary of the CEQA determination of significance for all construction and operations impacts discussed in Section 3.17.7.3, including both archaeological and historic built resources. Concerning archaeological resources, because of limited access to private lands within the APE, it is possible that as-yet-unknown archaeological sites qualifying as historical resources or unique archaeological resources could be identified within the APE as part of the phased historic properties identification effort that would be conducted when property access becomes available, prior to ground-disturbing activities. If such resources are identified and cannot be avoided, significant and unavoidable impacts on such archaeological sites could occur. The HSR Build Alternative also has the potential to damage previously unidentified archaeological sites that may not be identified through survey prior to construction. While cultural resource inventories would be completed once legal access is secured, no inventory can ensure that all resources are identified. Damage to these resources may disrupt the spatial associations that contain scientifically useful information and therefore alter their potential basis for eligibility. Additionally, given the nature of the HSR Project and the design requirements, an established alignment may not be able to be altered to avoid historical resources or unique archaeological resources discovered by the time property access is granted. For these reasons, the impact of the HSR Build Alternative could remain significant and unavoidable. Because all built environment resources were adequately visible from the public right-of-way during the windshield survey for the Burbank to Los Angeles Project Section, phased identification would not be required for historic built resources.

Table 3.17-14 Summary of CEQA Significance Conclusions and Mitigation Measures for Cultural Resources

Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
Construction			
Impact CUL #1: Construction Effects on Known Archaeological Resources	Significant ¹	CUL-MM#1	Less than Significant
Impact CUL #2: Construction Effects on Unknown Archaeological Resources	Significant	CUL-MM#1 CUL-MM#2 CUL-MM#3	Less than Significant
Impact CUL #3: Construction Effects on Historic Built Resources	Significant ²	CUL-MM#7 CUL-MM#12 CUL-MM#13	Significant ²
Operations			
Impact CUL #4: Operations Effects on Archaeological Resources	No Impact	No mitigation measures are required	Not applicable
Impact CUL #5: Operations Effects on Historic Built Resources	Less than Significant	No mitigation measures are required	Not applicable

¹ Significant impact related to known archaeological resource P-19-101229

² Significant impact related to historic bridges (Arroyo Seco Parkway Historic District [both eastbound and westbound viaducts of the Los Angeles River Bridge], Broadway [Buena Vista] Viaduct, Spring Street Viaduct, and Main Street Bridge)

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