4.5 Cultural Resources

4.5.1 Introduction

This section describes the environmental consequences related to cultural resources from operations of the NEPA Alternatives. The analysis in this section is based on the following key sources of information.

- Background records/literature review conducted at the Northwest Information Center, Sonoma State University, Rohnert Park; the repository of cultural data for Santa Clara County.
- Consultation with the California State Historic Preservation Officer (SHPO), Native American Heritage Commission (NAHC), local Native American groups, and individuals.
- *VTA's Silicon Valley Rapid Transit Corridor EIS/SEIR Technical Memorandum, Archaeological Survey and Sensitivity Report for SVRTC EIS/SEIR* (Far Western Anthropological Research Group 2010).
- *VTA's BART Silicon Valley—Phase II Extension Project, Archaeological Resources Technical Report* (Far Western Anthropological Research Group 2016).
- *VTA's BART Silicon Valley—Phase II Extension Project: Supplemental Built Environment Survey Report* (JRP Historical Consulting 2016).
- *VTA's BART Silicon Valley—Phase II Extension Project: Finding of Effects* (JRP Historical Consulting, ICF, Far Western Anthropological Research Group 2016).

4.5.2 Environmental and Regulatory Setting

4.5.2.1 Environmental Setting

Two Areas of Potential Effects (APEs), one for archaeological resources and one for architectural resources, have been identified and are included in this SEIS/SEIR as Appendices D.1 and D.2. The APEs for archaeological and historic architectural resources were defined by the Federal Transit Administration (FTA) and VTA, in consultation with the SHPO. On April 6, 2016, the SHPO concurred with the delineation of the APE. Since then, options for the Twin-Bore and Single-Bore tunnel as well as station design options, construction staging areas, parking lots, ventilation structures, and other design features had been incorporated into the project design, which resulted in changes to the APE. The SHPO concurred on the delineation of the revised APEs on October 28, 2016 (Polanco 2016). Additional details on the APEs are provided below.

Archaeology

Area of Potential Effect

The archaeological APE was identified in accordance with National Historic Preservation Act (NHPA) Section 106 (36 Code of Federal Regulations [CFR] part 800.4(a)(1)) and encompasses all areas where BART Extension construction and staging would occur. It encompasses both a horizontal and vertical extent, measuring approximately 6 miles in length, a maximum of 1,897 feet in width (including the combined width of the Twin-Bore and Single-Bore Options), and reaches depths up to 120 feet below surface.

Besides the 5-mile-long underground tunnel corridor route, the eastern extent of the APE includes surface construction staging areas (CSAs) and the East Tunnel Portal east of U.S. 101 and south of Mabury Road in the City of San Jose; CSAs in part of the existing Union Pacific Railroad right-of-way, including the bridge over U.S. 101; and the Alum Rock/28th Street Station, just west of U.S. 101 and north of Alum Rock Avenue. The tunnel then passes under Coyote Creek, includes the 13th Street Mid-Tunnel Ventilation Structure, and passes through downtown San Jose where the San Jose Station East and West Options and associated CSAs are proposed. Another CSA is under the elevated roadway of State Route (SR) 87, followed by the Diridon Station South and North Options, and the Stockton Avenue Mid-Tunnel Ventilation Structure. The West Tunnel Portal, Newhall Maintenance Facility, Santa Clara Station, and additional CSAs extend along the west end of the APE. The APE map can be found in Appendix D.2 of this document, and a detailed text description is presented in the *Archaeological Resources Technical Report* (ARTR).

The majority of the alignment (about 5 of the 6 miles) would consist of subway tunnels excavated by a tunnel boring machine, and in those areas, no surface deposits would be disturbed. Tunnel depths vary across the corridor, ranging between 30 and 80 feet for the Twin-Bore Option, and between 40 and 120 for the Single-Bore Option. This depth places most of the tunnel length well below where cultural deposits would be anticipated. The station boxes, crossovers, station entrances, and supporting infrastructure would be excavated from the surface and would variably extend to approximately 70 to 150 feet deep. Excavations at the campus areas of the four stations would range from approximately 12 to 15 feet for elevator shafts, utilities, and site preparation. Pile driving for tall structures within the station campuses typically ranges from 30 to 90 feet deep depending on site conditions. Excavations at the two mid-tunnel ventilation facilities would extend from the surface to approximately 75 to 90 feet deep. Excavations at the end-of-the-line maintenance facility would range from 5 to 10 feet deep for utility relocation and site preparation. Excavation for building pads within the maintenance facility would range from approximately 15 to 20 feet deep, with pile driving for tall structures at depths of 30 to 90 feet deep. Cut-and-cover excavation at the East and West Tunnel Portals would range from approximately 75 to 90 feet deep.

In the staging areas outside of permanent footprints, minimal ground disturbance and compaction is anticipated (1–2 feet) to account for stockpiling of soils or building materials,

machinery, and other construction equipment. However, some portions of staging areas may be subject to greater disturbance, such as possible excavation to 3–5 feet, for detention areas to dry out materials such as concrete washout pits.

Background Records Search and Archival Research

Bibliographic references, previous survey reports, historic maps, and archaeological site records pertinent to the archaeological APE were compiled through a records search of the California Historical Resources Information System in order to identify prior archaeological studies and known cultural resources within a 0.5-mile area surrounding, or adjacent to, the archaeological APE. The area within this 0.5-mile search radius is referred to as the *study area* or *records search area* in this section.

Records searches were conducted in 2001, 2002, 2008, 2013, and 2015 at the Northwest Information Center of the California Historical Resources Information System (Ruby et al. 2010; Far Western 2016).

The records search involved a review of the following.

- Site records for previously recorded sites.
- All previous studies conducted within 0.5 mile of the archaeological APE.
- The National Register of Historic Places (NRHP).
- The California Historic Resources Inventory (HRI).
- The Office of Historic Preservation (OHP) Historic Properties Directory (HPD).

Archival and geoarchaeological research, pedestrian inventory, bore hole monitoring, and records searches identified one formally recorded archaeological site within the APE (site CA-SCL-363H/P-43-000369), the potential for archaeological deposits associated with 84 historic-era sites, and areas of high sensitivity for buried cultural deposits.

Summary of Native American Consultation

VTA, on behalf of the FTA, contacted the NAHC on March 4, 2015, to request a search of the Sacred Lands File (SLF) and to provide a list of interested Native American representatives. The NAHC responded on March 26, 2015, stating that a search of the SLF did not contain any records of Native American sacred sites in or adjacent to the archaeological APE.

The NAHC also provided a list of 11 Native American contacts who might have information pertinent to the BART Extension or have concerns regarding the proposed actions. Because the BART Extension was initiated before July 2015, California State Assembly Bill 52 (Chapter 532, Statutes of 2014) does not apply for CEQA. For Section 106, the following is a list of the Native American Identified Contacts whom FTA contacted in regards to the BART Extension.

- Jakki Kehl, Ohlone/Costanoan
- Katherine Erolinda Perez, Ohlone/Costanoan, Northern Valley Yokuts, Bay Miwok
- Linda Yamane, Ohlone/Costanoan
- Valentin Lopez, Chairperson, Amah Mutsun Tribal Band
- Edward Ketchum, Amah Mutsun Tribal Band
- Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band
- Michelle Zimmer, Amah Mutsun Tribal Band of Mission San Juan Bautista
- Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan
- Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area
- Andrew Galvan, The Ohlone Indian Tribe
- Ramona Garibay, Representative, Trina Marine Ruano Family

The ARTR contains the Native American correspondence sent and received as well as phone call transcripts between VTA and Native American contacts for the BART Extension to date. Comments received during the consultation process included the following: requests to be kept informed as the process progresses, requests for copies of the cultural studies when they are available, and requests that cultural resource training be required for construction crews because the project is located in culturally sensitive areas. Valentin Lopez, Chairperson of the Amah Mutsun Tribal Band, deferred review and comment on this project to the Muwekma Ohlone Indian Tribe and representative Rosemary Cambra. No resources, including traditional cultural properties, were identified during the consultation process described above. Native American consultation for the Phase II Project is ongoing and will be updated as responses are received.

Resources

Known Resource CA-SCL-363H (CA-SCL-363H/P-43-000369)

This site contains archaeological features associated with the Spanish Period Amesquita Adobe as well as Late American commercial and residential features, some of which are possibly associated with one of the City's post-1877 Chinatowns. It encompasses a part of the city's original Pueblo San Jose de Guadalupe, which was established in 1777. Most of the site is considered eligible for listing to the NRHP under Criteria A and D, although the portion underlying SR 87 is not.

The Amesquita Adobe was built in the 1790s and is named for Manuel Amesquita, one of the original founders of the Pueblo San Jose de Guadalupe. The building remained in the Amesquita family until 1848 and was dismantled in 1925. The building may have been the oldest fired-brick, two-story residence in California and was used as the region's first jail (Gilreath 2003). The dismantled adobe building was apparently reconstructed in Cupertino sometime around 1925 within an unspecified historic park. The adobe's foundations were

exposed during archaeological excavations conducted in 1979 by Archaeological Resource Management (Cartier 1979) and remains protected by two feet of sand on its sides and top (City of San Jose 2013). The adobe foundations lie outside the APE just south of the tunnel alignment.

Extensive additional excavations at the site conducted for various redevelopment projects since 1979 have revealed historic trash and privy deposits and foundations associated with a Chinese laundry, the Orange Mill/Distillery Complex, a flour mill, an undertaker, a wine depot, residences, and delivery stables (e.g., Basin Research Associates 2003; Caltrans 2003; Cartier et al. 1984). All these deposits and features were encountered at maximum depth of 6 feet.

The site extends across the city block now bounded by Santa Clara Street on the north, Almaden Boulevard on the east, West San Fernando Street on the south, and Guadalupe River on the west. SR 87 courses north-south across its western portion, and that portion of the site underlying its right-of-way was greatly disturbed during the highway construction and during prior river channelization conducted by the U.S. Army Corps of Engineers (Basin Research Associates 2003). Consequently, the Federal Highway Administration determined that this disturbed portion of the site did not contribute to the site's eligibility. This correspondence is provided in the *Finding of Effects*. The SHPO concurred with this finding but noted that historic archaeological deposits might still exist to the west of the right-of-way (Mellon 2003a,2003b,2003c). This contradicts the most recent boundary revision proposed for this site (Gilreath 2003), which confines the site to the east of SR 87. For the BART Extension, therefore, the site boundaries are considered to extend west of SR 87 to the Guadalupe River as per SHPO.

Unknown Resources

The 2016 ARTR identified numerous locations within the APE where archaeological resources or human burials may be expected. According to the buried site sensitivity assessment in the ARTR, there are several locations within the APE where buried prehistoric archaeological deposits may present (i.e., areas of buried site sensitivity). Buried site sensitivity was also identified in the vicinity of the proposed stations, vents, and station portals. Additionally, Holocene-age sediments that may contain cultural materials may occur in the area between Coyote Creek and the Guadalupe River.

In addition to CA-SCL-363H, there are 84 locations within or immediately adjacent to the APE where historic-period archaeological materials may be discovered based on archival research. Of those, 77 are within the APE, and 7 are adjacent to the APE (within 30 feet) and could potentially extend into the APE. Of these 84 locations, 55 are in areas of proposed surface disturbance by the BART Extension, and 29 are above the proposed underground tunnel alignment.

Whether those resources qualify as significant under Section 106 of the National Historic Preservation Act cannot be determined without further research and testing. Preconstruction

archaeological testing is recommended to test the sensitive areas within the APE that may be disturbed by construction. However, many of the sensitive areas are located under existing buildings or infrastructure that would have to be removed prior to testing, are located on private property, or both. Therefore, it is not feasible to test all areas of potential buried site sensitivity at this time.

Therefore, a Draft Programmatic Agreement (PA) has been prepared for the identification and evaluation of archaeological resources in phases prior to construction of the project and treatment of archaeological resources and burials in the event that such resources are discovered during construction activities. The Draft PA includes an outline for an Archaeological Resources Treatment Plan (ARTP) that will be prepared. The ARTP will describe archaeological procedures, notification and consultation requirements, professional qualifications requirements, and procedures for the disposition of artifacts if any are discovered. The preparation and implementation of the Draft PA and ARTP are identified in Chapter 5, Section 5.5.6, *Cultural Resources*, as Mitigation Measure CUL-CNST-A. The Draft PA is included in Appendix D.3.

On October 28, 2016, the SHPO concurred that FTA and VTA's historic resources identification efforts to date were appropriate for the Undertaking, and the development of a Programmatic Agreement and Treatment Plan to address the phased archaeological identification efforts was appropriate (Polanco 2016).

Historic Architecture

Area of Potential Effects

A separate APE, referred to as the architectural APE, was delineated for historic architectural resources or built environment resources to allow for the identification and analysis of potential effects on this type of historic property. The architectural APE, as shown in Appendix D.1, reflects the BART Extension Alternative as described in Chapter 2, *Alternatives*. In accordance with NHPA Section 106, CFR Part 800.4(a)(1), the architectural APE includes the Area of Direct Impact (ADI), plus a buffer area immediately adjacent to surface construction and the legal parcels immediately above the work for tunneled portions of the BART Extension Alternative. Where the BART Extension Alternative bisects a legal parcel, the architectural APE extends to encompass the entire legal parcel.

Background Records Search

Historic architectural resources generally include buildings, structures, objects, and districts that are more than 50 years of age. However, to account for the long lead time between preparation of the environmental documentation and actual construction, the age limit was extended to 40 years to include buildings, structures, and features constructed in or prior to 1975. The BART Extension is scheduled to be operational in 2025; therefore, resources constructed in 1975 or before would potentially be historic resources in 2025 and require

evaluation. Those resources constructed in or before 1975 have been included in the survey population in addition to the resources added due to the expanded APE since 2003.

The initial survey efforts were completed in 2003 for the full 16-mile BART Silicon Valley Program (JRP Historical Consulting 2003). As previously discussed, design refinements such as station design options, construction staging areas, parking lots, ventilation structures, and other design features, resulted in a revised APE. Additional surveys and record searches were conducted for the revised APE. For reference purposes, the survey population resources have been assigned Map Reference numbers; these include properties identified as listed in or determined eligible for the NRHP as part of the initial survey efforts (JRP Historical Consulting 2003). The Map Reference numbers are identified in Tables 4.5-1 through 4.5-3, below, and are shown on aerial base maps with a reference number that consists of the sheet letter and resource reference number (these maps are included as Figure 3 in Appendix A of the *Supplemental Built Environment Survey Report* (JRP Historical Consulting 2016). For example, resources located on Figure 3-A have been assigned Map Reference numbers "A-01, A-02," etc., and resources located on Figure 3-D are "D-01, D-02," etc.

In addition to the background records search discussed above, which included built environment resources, additional research was conducted to determine which resources within the architectural APE were built in or before 1975 and would be studied further as part of the survey and evaluation process. This included property records research through First American Real Estate Solutions (FARES) and CoreLogic commercial databases; and the review of current and historic topographic and property maps, Santa Clara County property records, building permits for the City of San Jose, historic aerial photographs, Sanborn Fire Insurance Company maps, and other documents, including previous surveys of historic architectural resources. The following data sources were also examined for known historic architectural resources.

- National Register of Historic Places (both listed and determined-eligible properties).
- California Register of Historical Resources.
- California Inventory of Historic Resources (OHP 1976).
- California Points of Historical Interest (OHP 1992).
- California Historical Landmarks (OHP 1995).
- Directory of Properties in the Historic Property Data Files for Santa Clara County (updated April 2014).

Of the more than 500 historic-era built environment resources identified within the 0.5-mile buffer around the BART alignment and stations from the 2013 and 2015 record searches conducted at the NWIC, 7 were located within the architectural APE. These resources were found to be not eligible for the NRHP and are not historic properties under Section 106, nor are they historical resources for the purposes of CEQA. However, 27 known historic properties located within the current architectural APE were identified within previous

survey reports, including the inventory and evaluation report completed in 2003 for VTA's 16-mile BART Silicon Valley Program (JRP Historical Consulting 2003). All 27 properties are listed in or determined eligible for the NRHP and CRHR (see Table 4.5-1). Also, during the field surveys in 2015 and 2016, an additional 2 resources were discovered to be eligible for the NRHP and are described in Table 4.5-2. Two other properties identified in the 2003 survey efforts were found not eligible for the NRHP but were eligible for the CRHR (Table 4.5-3). The remaining resources identified through the NWIC record searches are not historic properties because they were previously found not eligible for the NRHP or CRHR, are no longer extant, or were not within the architectural APE.

The survey population was inspected in the field, photographed, and described in detail on Department of Parks and Recreation (DPR) 523 forms, as necessary. Research collected during the 2003 survey was utilized to the extent possible for the survey population and was augmented with additional research at the California State Library, Sacramento; Shields Library, University of California, Davis; Santa Clara County Assessor's Office; California Room, San Jose Public Library; the archives of "History San Jose" at Kelly Park; the San Jose City Planning Department, Building Division; and various online sources.

Consultation with Historic Preservation Groups

As part of earlier survey effort conducted for the first phase of the BART Silicon Valley Program (JRP Historical Consulting 2003) and pursuant to Section 106 of the National Historic Preservation Act, interested parties were contacted through a notification letter circulated in November 2002, with follow-up correspondence in January 2003. Letters were also sent to 25 local historical agencies and organizations requesting information regarding known or potential historic resources in the vicinity. These agencies and organizations included the following:

- Santa Clara County Planning Office
- Alameda County Planning Department
- City of San Jose Planning Department
- City of San Jose Historic Preservation Officer
- City of Milpitas Planning Department
- Alameda County Historical Society
- Santa Clara County Historical Heritage Commission
- San Jose Historic Landmarks Commission
- San Jose Redevelopment Agency
- East Santa Clara Street Revitalization Committee
- Los Fundadores–Santa Clara
- Victorian Preservation Association
- City of Santa Clara Planning Department
- City of Santa Clara Historical and Landmarks Commission

- Heritage Council of Santa Clara County
- Milpitas Cultural Resources Preservation Board
- Milpitas Historical Society
- Historical Preservation Society of Santa Clara
- History San Jose and Historical Association
- Preservation Action Council of San Jose
- Santa Clara County Historical and Genealogical Society
- South Bay Historical Railroad Society
- California Trolley and Railroad Corporation
- National Railroad Historical Society Central Coast Chapter
- Caltrain/Peninsula Corridor Joint Powers Board (JPB)

Responses were received from Los Fundadores–Santa Clara and the City of Milpitas. Follow-up meetings were held with the City of San Jose Historic Preservation Officer, Preservation Action Council of San Jose, San Jose Historic Landmarks Commission, City of Santa Clara Historical and Landmarks Commission, South Bay Historical Railroad Society, and JPB. Comment letters related to the 2004 EIR and 2007 Supplemental EIR were received from the City of San Jose Planning Department, City of San Jose Historic Preservation Officer, Preservation Action Council of San Jose, San Jose Historic Landmarks Commission, City of Santa Clara Historical and Landmarks Commission, and South Bay Historical Railroad Society. Coordination with the historical agencies and organizations remains ongoing.

FTA and VTA coordinated with SHPO regarding the inventory of cultural resources within the APE, the eligibility of these resources for listing on the NRHP, and the impacts of the alternatives to such eligible resources. Meetings with the SHPO were held on October 30, 2003, January 26, 2009, December 17, 2009, in 2013, and on January 17, 2014, February 29, 2016, May 5, 2016, and June 8, 2016.

In addition, VTA, FTA, and JRP Historical Consulting have worked closely with the historic preservation covenant holder for the two listed train stations within the APE: Ms. Lorie Garcia of the South Bay Historic Railroad Society (SBHRS), whose headquarters are located within the Santa Clara Station. VTA, principals of JRP, representatives of local communities, and Ms. Garcia also participated in a meeting and site visit on July 25, 2002, of both the NRHP-listed railroad stations within the APE: Diridon (Cahill) Station and Santa Clara Station. The SBHRS is the covenant holder for both these stations, which are currently part of the Caltrain system.

On January 30, 2015, VTA distributed a Notice of Preparation (NOP) to advise interested agencies and the public that VTA intends to prepare an SEIS/SEIR for the Phase II Project.

VTA distributed the NOP to approximately 225 agencies, elected officials, and interested parties and organizations in the study area. VTA also notified potentially interested individuals and organizations regarding the scoping process and public scoping meetings for the Phase II Project. VTA used multiple methods to announce the scoping process and public meetings, including display advertisements in local newspapers, mailings to addresses located in the vicinity of the Phase II Project, emails sent to recipients on the VTA emailing list, news releases posted on the VTA website, and social media postings on VTA's Facebook page and Twitter account.

VTA conducted three formal environmental scoping meetings to gather input and comments prior to the development of the SEIS/SEIR. Meetings were held on February 12, 17, and 19, 2015, in Santa Clara, downtown San Jose, and east San Jose. Each public scoping meeting included a sign-in/open house portion of the meeting, where the public could view Phase II Project informational display boards of the alignment and concept exhibits for the stations, and a presentation portion of the meeting during which VTA staff provided an overview of the Phase II Project and environmental process in PowerPoint format. Following the presentation, formal public comments on the presented materials were documented. Oral comments provided at the meetings were transcribed by a court reporter. Written comments were accepted at the meetings and via mail or email to VTA until the comment deadline.

Starting in 2015, VTA re-initiated three Community Working Groups (CWGs), one for the Alum Rock/28th Street Station area, one for the Downtown San Jose Station (East and West Options)/Diridon Station (South and North Options) area, and one for the Santa Clara Station area to communicate project information to key members of the community and provide feedback on strategies related to successfully delivering and completing the BART Extension. CWGs receive briefings on technical areas and project updates and act as a conduit for the community at large. Group members include the leaders of neighborhood and business associations, community organizations, advocacy groups, major property owners, and planning commissioners. VTA invited Mr. Jack Morash, who has been a Santa Clara CWG member since June 11, 2015, as a representative of the South Bay Historical Railroad Society. Mr. Morash provides project updates to Lorie Garcia and contributes to the CWGs by notifying VTA staff of the SBHRS concerns about the project.

Consultation with historic preservation groups for the Phase II Project is ongoing and will be updated as responses are received.

Historic Architectural Resources Present in the APE

The architectural APE includes 129 historic built-environment resources constructed in or before 1975. The SHPO concurred with the eligibility findings of the 2003 inventory and evaluation report (*Historic Resources Evaluation Report*) for the BART Silicon Valley Program (JRP Historical Consulting 2003) within letters dated June 9, 2003 and July 9, 2003 (Mellon 2003d, 2003e). In a letter dated October 28, 2016 (Polanco 2016) the SHPO also agreed with the eligibility determinations in the 2016 *Supplemental Built Environment Survey Report* (JRP Historical Consulting 2016). The following summarizes the properties

that were determined eligible or not eligible for the NRHP. SHPO concurred with the eligibility of the properties on October 28, 2016 (Polanco 2016).

- 27 are currently listed in or have previously been determined eligible for the NRHP and CRHR.
- 2 have been determined eligible for the NRHP and CRHR as part of the current study.
- 2 have been determined not eligible for the NRHP but are eligible for the CRHR.
- 1 has been determined not eligible for the NRHP and CRHR but is a locally listed landmark and is therefore a historical resource for the purposes of CEQA (but is not a historic property under Section 106).
- 2 have been determined not eligible for the NRHP or CRHR, but are listed in local government registers or inventories and are therefore historical resources for the purposes of CEQA (but are not historic properties under Section 106).
- 95 have been determined not eligible for listing in the NRHP or CRHR.

The 29 historic architectural resources that are listed in or determined eligible for the NRHP and CRHR are historic properties under Section 106 and historical resources under CEQA. Ten of these historic properties are contributing elements to a NRHP-listed historic district (the San Jose Downtown Commercial District; see tables below), but are not individually eligible. The four properties that are eligible for the CRHR only or are listed in a local register or inventory are historical resources for the purposes of CEQA only. Tables 4.5-1 and 4.5-2 list the 29 historic properties (Section 106), which are also historical resources (CEQA). Table 4.5-3 lists the four properties that are only historical resources under CEQA. The remaining 95 resources are not historic properties (Section 106) or historical resources (CEQA).

Table 4.5-1: Properties Listed in or Previously Determined Eligible for the National Register of Historic Places and California Register of Historical Resources

Map Reference	APN	Street Address	Year Built	NRHP Status Code[a]	Date of Determination or listing
C-25	467-08-007 467-08-009 467-08-014	1375–1401 Santa Clara Street	1916–1960	2S2	6/9/2003
C-26	467-10-043	1191 Santa Clara Street	1949	2S2	6/9/2003
C-27	467-10-046	1169 (1167) Santa Clara Street	1888	2S2	6/9/2003
D-03	467-57-082	227–247 Santa Clara Street	1928	2S2 2S3	2/6/2006
E-08[b]	467-23-035	142–150 Santa Clara Street	1913	1D	1/1/1983
E-09[b]	467-23-036	138 Santa Clara Street	1905	1D	1/1/1983
E-10[b]	467-23-038	124–126 Santa Clara Street	1900	1D	1/1/1983
E-11[b]	467-23-039	114–118 Santa Clara Street	1920	1D	1/1/1983
E-12[b]	467-23-089	100 Santa Clara Street	1912	1D	1/1/1983
E-13[b]	467-22-149	96 Santa Clara Street	ca. 1883	1D	1/1/1983
E-14[b]	467-22-148	52 Santa Clara Street	1900	1D	1/1/1983
E-15	467-21-028	19 East 2nd Street	1925	2S2	1/1/1981
E-18[b]	467-22-041 467-22-042	42–48 Santa Clara Street	1930s	1D	1/1/1983
E-19[b]	467-22-158	36–40 Santa Clara Street	1869	1D	1/1/1983
E-20	467-54-001 through 467-54-034	22 North 1st Street	1926	2S2	8/3/1981
E-21[b]	467-62-001 467-62-007 through 467-62-020	8–14 South 1st Street	1926	1D	1/1/1983
E-22	259-40-038	34 Santa Clara Street	ca. 1880 1910s 1920s	2S2	6/9/2003
E-23	259-34-018	81 Santa Clara Street	1926	2S2	6/9/2003
E-24	259-34-046	101 Santa Clara Street	1942	2S2	6/9/2003
E-25	259-38-128	374 Santa Clara Street	1934	2D2	5/29/1990
E-35	259-35-05	151–155 Santa Clara Street	ca. 1884 1930 ca. 1970	2S2	2/6/2006
E-36	259-35-035	161–167 Santa Clara Street	1883	2S	6/4/1996
F-13	261-34-020	Cahill Station and Santa Clara / Alameda Underpass	1935	1D	4/1/1993
F-14	261-33-020	848 The Alameda	ca. 1884	2S	6/9/2003
F-15	261-01-074	176 North Morrison Avenue	ca. 1898	2S2	6/9/2003

Map Reference	APN	Street Address	Year Built	NRHP Status Code[a]	Date of Determination or listing
I-01	230-06-031 230-06-032 230-06-050 230-06-051	1 Railroad Avenue (Santa Clara Station)	1863–1864 1877	1S	2/28/1985
I-02	230-06-040	Benton Street and Railroad Avenue (Santa Clara Tower, Speeder Shed, and Tool House)	1904 1927	2S2 2D	6/9/2003

[a] Applicable NRHP Status Codes are:

1D – Contributor to a district or multiple resource property listed in NRHP by the keeper. Listed in the CRHR.

2D – Contributor to a district determined eligible for the NRHP.

1S – Individual property listed in NR by the Keeper. Listing in the CRHR.

2D2 – Contributor to a district determined eligible for NRHP by consensus through Section 106 process. Listed in the CRHR.

2S – Individual property determined eligible for NRHP by the Keeper. Listed in the CRHR.

2S2 – Individual property determined eligible for NRHP by a consensus through Section 106 process. Listed in the CRHR.

[b] Contributor to the San Jose Downtown Commercial District, which was listed in the National Register of Historic Places in 1983.

Table 4.5-2: Properties Determined Eligible for Listing in the National Register of Historic Places and California Register of Historical Resources as Part of the Phase II Extension Project

Map Reference	APN	Street Address	Year Built	NRHP Status Code[a]
E-27	467-20-078	30 N. 3rd Street	ca. 1903	2S2
E-22	261-01-063	179-181 Rhodes Court	1948	2S2

[a] Applicable NRHP Status Codes are:

3S – Appears eligible for NRHP as an individual property through survey evaluation.

Table 4.5-3: Survey Population Properties that Are Historic Resources for CEQA but Are Determined Not Eligible for Listing in the National Register of Historic Places and/or California Register of Historical Resources as Part of the Phase II Extension Project

Map Reference	APN	Street Address	Year Built	NRHP Status Code[a]
D-04	467-24-036	48-52 South 6th Street	ca. 1905–1907	5S2, 6Z, 6Y
D-05	467-24-035	58 South 6th Street	1921	6L, 6Z, 6Y
E-16	467-21-027	43–49 Santa Clara Street	1887, 1927	5S3, 6Z, 6Y
E-17	467-21-026	35–39 Santa Clara Street	1876, 1936	5S3, 6Z, 6Y
F-19	261-33-023	808 and 824–826 The Alameda	ca. 1920s-1930, 1954	5S1, 6Z, 6Y

[a] Applicable NRHP Status Codes are:

5S2 – Individual property that is eligible for local listing or designation.

5S3 – Appears to be individually eligible for local listing or designation through survey evaluation.

6L – Determined ineligible for local listing or designation through local government review process; may warrant special consideration in local planning.

6Y – Determined ineligible for NRHP by consensus through Section 106 process. Not evaluated for CRHR or local listing.

6Z – Found ineligible for NRHP, CRHR, or Local designation through survey evaluation.

4.5.2.2 Regulatory Setting

Federal

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) (United States Code [USC], Title 43, Section 4321 et seq.) requires the consideration of potential environmental effects, including potential effects on cultural resources, in the evaluation of any proposed federal agency action. This includes consideration of unique characteristics of the geographic area such as proximity to cultural resources and the degree to which the action may adversely affect districts, sites, highways, objects, or landscapes listed in or eligible for listing in the National Register of Historic Places (NRHP).

The NEPA regulations also require that, to the fullest extent possible, agencies integrate NEPA review concurrently with other environmental regulations, including surveys and studies required by the NHPA (described below), which, under Section 106, requires federal agencies to consider the effects of their actions on historic properties.

Section 106 of the National Historic Preservation Act

The NHPA (16 USC 470 et seq.) establishes the federal government policy on historic preservation and the programs—including the NRHP—through which this policy is implemented. Under NHPA, significant cultural resources, called historic properties, include any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the NRHP. A property is considered significant if it meets the NRHP criteria.

Section 106 requires that impacts on historic properties be taken into consideration in any federal Undertaking. The process for implementing the NHPA contains five steps: (1) initiating the Section 106 process, (2) identifying historic properties, (3) assessing adverse effects, (4) resolving adverse effects, and (5) implementing the project and any stipulations in an agreement document.

Section 106 affords the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any Undertaking that would adversely affect historic properties eligible for listing in the NRHP. 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 inclusions in the NRHP.

Archaeological and Historic Preservation Act

The Archaeological and Historic Preservation Act (16 USC 469–469(c)-2) provides for preservation of significant historic or archaeological data, including relics and specimens 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.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (16 USC 470(a)-11) provides for the protection of archaeological resources and sites on public lands and Indian lands; establishes a procedure for the issuance of permits for conducting cultural resources research; and prescribes penalties for unauthorized excavation, removal, damage, alteration, or defacement of archaeological resources.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (42 USC 1996) 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.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (25 USC 3001–3013) sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items on federal and tribal lands during implementation of a project. The act clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American tribes or tribes likely to be lineal descendants or culturally affiliated with the discovered remains or objects.

American Antiquities Act

The American Antiquities Act (16 USC 431–433) prohibits appropriation, excavation, injury, or destruction of "any historic or prehistoric ruin or monument, or any object of antiquity" located on lands owned or controlled by the federal government. The act also establishes penalties for such actions and sets forth a permit requirement for collection of antiquities on federally owned lands.

4.5.3 Methodology

4.5.3.1 Determination of Effect on Historic Architectural Resources

The analysis of potential effects on historic architectural resources is based on the Criteria of Adverse Effects contained within 36 CFR 800: "Effect means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register." An *adverse effect* occurs "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….Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."

Adverse effects include, but are not limited to, the following.

- 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's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines.
- Removal of 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 which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian 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.

An *adverse effect* would occur if the BART Extension Alternative would cause perceptible changes to the significant characteristics of a resource and would inhibit the resource's interpretive potential.

4.5.4 Environmental Consequences and Mitigation Measures

This section identifies impacts and evaluates whether they would be adverse according to NEPA, using the criteria (i.e., context and intensity) identified in Section 4.5.3, *Methodology*. This section also identifies measures to avoid, minimize, or mitigate impacts.

4.5.4.1 No Build Alternative

The No Build Alternative consists of existing transit and roadway networks and planned and programmed improvements (see Chapter 2, Section 2.2.1, *NEPA No Build Alternative,* for a list of these projects). The No Build Alternative projects may result in varying degrees of effects to cultural resources typically associated with transportation projects in a culturally rich and diverse area. Where architectural and archaeological resources have adverse effects from the No Build Alternative projects, mitigation measures could include, but not be limited to, avoidance, protection, data recovery, and public education. Inadvertent or unexpected discoveries of cultural resources would be addressed in accordance with federal and state laws related to the protection of cultural resources. These projects would undergo separate environmental review to define potential substantial effects on historic resources, both archaeological and architectural, and to determine appropriate mitigation measures.

4.5.4.2 BART Extension Alternative

Archaeological Resources

The only operational activity that would have the potential to affect the one known archaeological historic property during BART operations would result from potential vibration impacts of the trains operating along the tracks within the tunnel.

A *Noise and Vibration Technical Report* was prepared for the BART Extension (Wilson, Ihrig & Associates 2016), in which data were based on criteria defined in the FTA *Transit Noise and Vibration Impact Assessment*, also referred to as the FTA Guidance Manual. The FTA Guidance Manual provides criteria to evaluate operational impacts for the BART Extension. This study found that operational (ground-borne) vibration primarily causes human annoyance or interference with use of equipment sensitive to vibration. Damage to historic buildings from vibration resulting from train operation is "unlikely, except when the track will be very close to the structure." In these cases, FTA provides direction to use the construction vibration threshold of 0.12 inches per second Peak Particle Velocity (PPV)—or alternatively 90 vibration velocity decibels (VdB) from the PPV limits—for those structures. Operational vibration levels at this historic property would be below 90 VdB; therefore, vibration from operation of the BART Extension would not adversely affect CA-SCL-363H

or the elements of CA-SCL-363H that contribute to its eligibility to the NRHP. Therefore, operation of the BART Extension Alternative would result in *no adverse effect* on the one known archaeological historic property within the APE. Refer to Chapter 5, Section 5.5.6, *Cultural Resources*, for a detailed discussion about the BART Extension's effects on archaeological resources caused by construction.

Historic Architecture

Elements of the BART Extension located near historic properties include the connection to the Phase I Berryessa Extension, tunnel portals, ventilation or electrical facilities, Twin-Bore and Single-Bore Options, stations (Alum Rock/28th Street, Downtown San Jose East and West Options, Diridon South and North Options, and Santa Clara), and the Newhall Maintenance Facility. Operation of the BART Extension would cause *no adverse effects* on any of the 29 identified historic properties as described below.

Direct Adverse Effects

The elements of the BART Extension would result in *no direct adverse effects* on the identified historic properties because they would not result in the partial removal of, physical destruction of, or damage to any historic property. None of the aboveground components of the BART Extension alignment, including the elements described in the paragraph above, would result in the partial removal of, physical destruction of, or damage to any historic property.

Alum Rock/28th Street Station

The historic property near Alum Rock/28th Street Station, the Church of Five Wounds (Map Reference C-25), is located across the street from the station; therefore, the station is located outside of the historic property boundary and would not result in the partial removal of, physical destruction of, or damage to this historic property.

Downtown San Jose Station (East and West Options)

While some elements of the Downtown San Jose Station East and West Options, such as station entrance portals and elevators, would be located within the boundary of the San Jose Downtown Commercial District (see Map References E-08 through E-14, E-18, E-19, and E-21) and may alter the landscaping, infrastructure, and hardscape (i.e., sidewalks, curbs, light standards, and street furniture) within the public right-of-way at those locations, these features have been altered and/or replaced over time are not considered contributing elements of the district. Given the size of the historic district (28 contributing structures in total located within a more than two-square-block area over 11 acres), and that there are only three locations under the West Option and one location under the East Option where station entrance portals or elevators would be located within or immediately adjacent to the historic district, any potential alteration of the streetscape features within the public right-of-way would not present an adverse effect on the overall historic district.

Set in a dense urban setting, the San Jose Downtown Commercial District, which consists of late nineteenth and early twentieth century buildings predominantly one to five stories in height, has already been altered by the construction of modern (i.e., not dating to the historic district's period of significance) buildings, structures, and infrastructure, including the addition and/or replacement of light standards, mailboxes, signage, traffic and pedestrian lights, bus shelters, parking meters, and sidewalk improvements. The Undertaking's proposed one-story entrance portals and elevators are small in scale relative to the surrounding buildings, and their massing would be consistent with the character of the commercial district and existing transportation corridors. The historic integrity of the historic district and its contributors, including those that are adjacent to entrance portals and elevators (Map References E-13, E-14, and E-18), would remain unchanged.

Under the Downtown San Jose Station West Option, a station entrance portal is proposed within a vacant lot, currently used as a parking lot, adjacent to 81 Santa Clara Street (Map Reference E-23), which is individually eligible for the NRHP. The station entrance would include an elevator, stairs, and escalators set back from Santa Clara Street behind a glass façade. However, the glass façade of the entrance would be free standing and set back slightly from the façade of the historic property; therefore, it would result in *no direct adverse effect* on the historic building.

Refer to the *Indirect Adverse Effects* section below for additional analysis of potential effects on historic properties from the Downtown San Jose Station East and West Options.

Diridon Station South Option

Components of the Diridon Station South Option (Twin-Bore and Single-Bore Options), including a reconstructed bus transit center, station entrance portal, and tunnel ventilation, emergency exhaust ventilation, and fresh air shafts, would also be located within the boundary of the Cahill Station (Map Reference F-13). For the same reasons described above for the Diridon Station North Option, these features would be in an area already altered by the extant transit center and would be a considerable distance away (approximately 50 or more feet) from the key contributors (depot, wrought-iron fencing, tracks, and passenger sheds). These Undertakings would not cause the partial removal of, physical destruction of, or damage to any contributing elements of the historic property. The historic use and integrity of the historic property would be unchanged.

Diridon Station North Option

Portions of the Diridon Station North Option (Twin-Bore and Single-Bore Options) would be located within the boundary of the Cahill Station (Map Reference F-13). The aboveground features, including a reconstructed bus transit center, station entrance portal, and tunnel ventilation, emergency exhaust ventilation, and fresh air shafts, would be in an area already altered by the extant transit center and would be approximately 20 or more feet away from the depot, wrought-iron fencing, tracks, passenger sheds, and undercrossing, all of which contribute to the significance of this historic property. These features would not cause the

partial removal of, physical destruction of, or damage to any contributing elements of the historic property. The historic use and integrity of the historic property would be unchanged.

Newhall Maintenance Facility

Two historic properties (Map References I-01 and I-02) are located adjacent to the Newhall Maintenance Facility; however, operation of the maintenance facility would not result in the partial removal of, physical destruction of, or damage to these two historic properties.

Santa Clara Station

Santa Clara Station would be located more than 150 feet from the historic properties (Map References I-01 and I-02) and across several active passenger and freight heavy rail lines; therefore, the station would not result in the partial removal of, physical destruction of, or damage to these two historic properties.

Indirect Adverse Effects

The BART Extension Alternative would also result in *no indirect adverse effects* on the identified historic properties from the operation of tunnels, stations (Alum Rock/28th Street, Downtown San Jose East and West Options, Diridon South and North Options, and Santa Clara), or the Newhall Maintenance Facility. Indirect effects on historic properties may be caused by the introduction of new visual, auditory, and vibration elements from the Build Alterative. However, all below-grade features of the Twin-Bore and Single-Bore Options and stations would not be visible from the surface near any historic property, and therefore would not result in any indirect adverse visual effects on the 29 historic properties. Each station would include the operation of aboveground station entrances; ventilation, fresh air, exhaust, and access shafts. In addition, the Downtown San Jose Station would include the construction of a new building to house the emergency exhaust shaft and streetscape improvements. None of these aboveground components would cause any indirect adverse visual effect on historic properties. Refer to the series of figures included in the *Finding of Effects* (JRP, ICF, and Far Western 2016) that show existing conditions and simulated views depicting BART Extension elements such as station entrances and other aboveground elements in relation to eligible historic properties (see also, Chapter 5, Section 5.5, *Impacts from Construction of the BART Extension*). These figures are provided in Section 4.16, *Visual Quality and Aesthetics*.

Station entrance portals at all four stations would consist of canopy structures that would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and up to approximately 15 feet high. The length and width of the canopies vary depending on the number of escalators and/or stairs at each entrance portal location. These entrances would be in proximity to various historic properties, some of which are contributors to the San Jose Downtown Commercial District but not individually eligible, and some of which are outside the historic district but individually eligible. The small scale of these structures, which would be one-story in height, and the use of transparent materials, which would have the effect of reducing the appearance of the massing, would minimize visual impacts on nearby historic

properties and the historic district. The structures would be compatible with the existing urban setting and the character of the late nineteenth and early twentieth century historic district, which has already been modified by modern infill construction and infrastructure. These canopies would not noticeably block views when looking to or from historic properties, nor would they alter the character-defining features for which the historic properties or the historic district were found to be historically significant.

In addition, the Downtown San Jose West Option would include an entrance portal set back behind a free-standing glass façade adjacent to one historic property (Map Reference E-23), which is located outside of the boundaries of the historic district. The free-standing façade would be constructed of transparent glass and metal panels and would measure approximately 160 feet in length. Similarly, the entrance canopies at this location, which would be behind the free-standing façade, would be constructed using transparent glass walls and roof with only a thin entrance archway of non-transparent material. The one-story façade and the even smaller entrance canopies would be subordinate in terms of size and massing to the adjacent two-story buildings, and the use of transparent materials would minimize visual impacts on the nearby historic property. The façade would not visually detract from the architectural character of the historic property because it would be lower in height and use materials that are architecturally differentiated but compatible with the historic building. These canopies and façade would not noticeably block views when looking to or from the historic property, nor would they alter the character-defining features for which the historic property was found to be historically significant.

Ventilation, fresh air, exhaust, and access shafts associated with stations would extend approximately 12 feet above grade and measure approximately 15 by 20 feet. These station components would be visible from some historic properties; however, their viewshed and setting would not be adversely altered, and the historic integrity of the historic properties near these shafts would be unchanged. The small scale and massing of these elements would be consistent with the existing dense urban setting of these historic properties.

The operation of the Newhall Maintenance Facility and the Santa Clara Station would not cause any indirect adverse visual effects on the two nearby historic properties (Map References I-01 and I-02). All components of the station (except an underground pedestrian tunnel connection that would not be visible from either historic property), including a portal entrance, a one-story boarding platform, a parking structure that would be up to five stories in height, and two system facilities that would be 12 and 20 feet high, would be more than 200 feet from both historic properties, and all aboveground elements of the maintenance facility would be more than 150 feet from either historic property. Although both the station and maintenance facility would be visible from both historic properties, neither would adversely diminish the viewshed of the industrial and rail transportation setting of these historic properties. These historic buildings were originally constructed along a nineteenth century, at-grade railroad, and the introduction of a similar rail line and its associated station and maintenance facilities nearby would not diminish the qualities of these historic properties that qualify them for the listing in the NRHP.

Further, there are no indirect adverse effects on any historic property from predicted vibration or noise impacts from operation of the BART Extension Alternative at the location of any historic property. Operational noise has the potential to cause indirect adverse effects only on historic properties that have an inherent quiet quality that is part of a property's historic character and significance (i.e. churches, parks, and National Historic Landmarks with significant outdoor use). Of the 29 historic properties addressed in this report, only one, the Church of Five Wounds (Map Reference C-25), is considered to have an inherent quiet quality. The predicted operational noise level at the location of this historic church would reach up to 25 A-weighted decibels (dBA), a level less than the FTA threshold of 40 dBA for institutional buildings and historic buildings with an indoor use that involves meditation and study (i.e., a church or school). Thus, the BART Extension Alternative would result in no indirect adverse effects on the historic church from operational noise.

All other historic properties, which consist of commercial, transportation, industrial, and residential resources, do not have an inherent quiet quality that is part of their historic character or significance; therefore, the BART Extension Alternative would not result in any indirect adverse effect on those 28 historic properties from operational noise.

According to the FTA *Transit Noise and Vibration Impact Assessment* (2006), operational (ground-borne) vibration primarily causes human annoyance or interference with use of equipment sensitive to vibration. Damage to historic buildings from vibration resulting from train operation is "unlikely, except when the track will be very close to the structure." In these cases, FTA provides direction to use the construction vibration threshold of 0.12 in/sec PPV—or alternatively 90 vibration velocity decibels (VdB) from the PPV limits—for those structures. Operational vibration levels at all 29 historic properties would be below 90 VdB; thus, no adverse effects are anticipated on any historic properties from operational vibration.

In conclusion, under Section 106, the BART Extension Alternative would have *no adverse effect* on any of the 29 identified historic properties, and therefore, no further mitigation is necessary.

4.5.5 NEPA Conclusion

Operation of the BART Extension Alternative would result in *no adverse effect* under NEPA on archaeological resources, historic properties, or historic districts listed or eligible for the NRHP, and no mitigation is required.

The extension consists of a corridor and large land areas, and areas where access to properties is restricted. In addition, portions of the corridor include areas of sensitivity for encountering buried archaeological deposits and features, and the effect on historic properties cannot be fully determined prior to the approval of the Undertaking. As described in Chapter 5, Section 5.5.6, *Cultural Resources*, construction of the BART Extension may adversely affect as-yet unidentified archaeological sites eligible for the NRHP. FTA and VTA have therefore chosen to conduct the identification and evaluation of potential historic properties, and the resolution of any adverse effects on historic properties within the APE, in phases

pursuant to 36 CFR 800.4(b)(2) and 36 CFR 800.5(a)(3), subsequent to the approval of the Undertaking. Therefore, a Draft PA has been prepared, which includes an outline for an ARTP. The preparation and implementation of the Draft PA and ARTP are identified in Chapter 5, Section 5.5.6, *Cultural Resources*, as Mitigation Measure CUL-CNST-A. The Draft PA is included in Appendix D.3.

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